Appendix I Storm Water Analysis

Date	Description	Pages
May 17, 2004	Storm Water Analysis	20

URS

Technical Memorandum

Date: May 18, 2004

To: 11400 South EIS – Project File

From: Autumn Hu

Subject: Storm Water Runoff Flow Analysis

The storm water runoff impacts of Alternatives 1, 3A, 4, and 7 of the EIS were compared to the existing condition. Each Alternative includes possible road improvements to different combination of the following road segments:

- 10600/10400 South
- 11400 South
- 12300/12600 South
- Jordan Gateway/Lone Peak Parkway
- State Street

The receiving water bodies potentially affected by storm water runoff for Alternatives 1, 3A, 4 and 7 include:

- South Jordan Canal
- Midas Creek
- Jordan River
- Willow Creek

The proposed and existing drainage systems in the study area are shown in the attached figure. The figure includes direction of flow, discharge locations, receiving water bodies, and detention ponds. Storm water flow due to additional surface area proposed by the 4 alternatives were calculated using the rational method and information listed below.

$$Q = C*I(t)*A$$
, where

Q= flow rate, feet³/second

C=coefficient for surface condition, unitless

=> used 0.85

I =rainfall intensity, inches/hour

=> Rainfall data for the 2-year, 10-year, and 100-year storm event from the South Jordan Master Plan, May 2002 were used and are shown in Table 1. Intensity as a function of time data were fitted to a power equation and used in the flow calculation (as shown in the attached spreadsheets).



=> The time duration used to determine intensity is based on the maximum length of the road segment to the stormwater outfall. Duration is assumed to be 10 minute for the first 100 feet and 30 seconds per every 100 feet thereafter, as shown in the equation below.

 $t = 10 \min + 0.5 \min * [(Length, ft - 100 ft) / 100 ft]$

A=surface area, acres

=>Road surface areas for the existing conditions and various alternatives were calculated using the project design files.

The flow rates were calculated for various road segments. The impacts of each alternative at various discharge locations were determined by summing a combination of flow rates from the applicable road segments. The increases (over existing) in storm water runoff for a 2-year and 10-year storm are summarized in Table 2 as the Undetained Flow Summary. The Detained Flow Summary in Table 2 includes the impact to flow of the various detention ponds (where applicable). In some locations the detention ponds decrease the flow to the receiving water. However, in other locations, due to the fact that the pond is also utilized to detain flow from offsite sources that are much greater than that contributed by this project, the flow to the receiving water is actually greater than what is shown for the Undetained Flow Summary. The spreadsheets used to calculate the values shown in Table 2 are attached.



Table 1 - Intensity Duration Information

(South Jordan Master Plan, May 2002)

(South Jordan Mast	.ci i iaii, iviay 200.	۷)		
	(t)	(i)	(i)	(i)
Seconds	Minutes	2 year	10 year	100 year
		in/hr	in/hr	in/hr
300	5	1.992	3.504	5.256
900	15	1.192	2.144	3.556
1800	30	0.812	1.422	2.436
2700	45	0.601	1.045	1.78
3600	60	0.509	0.874	1.424
7200	120	0.325	0.55	0.845
10800	180	0.245	0.41	0.599
21600	360	0.146	0.231	0.317
43200	720	0.088	0.139	0.19
86400	1440	0.049	0.079	0.109

Table 2 - Flow Increase Summary

Table 2 - Flow In	icrease Sui	mmary					
	Und	detained	Flow Sun	nmary			
Outfall	SJC	JR1	JR2	JR3	MC	WC1	WC2
2-Year Storm, flow	(cfs)						
Alternative 1	7.61	2.62	8.82	17.50	4.91	9.28	4.62
Alternative 3A	7.61	3.83	-	17.50	-	8.32	4.66
Alternative 4	2.91	3.56	8.82	-	4.91	6.92	-
Alternative 7	2.91	3.83	8.82	-	4.91	9.43	3.46
10-year Storm, flow	(cfs)						
Alternative 1	12.97	4.47	15.41	29.99	8.42	16.04	7.96
Alternative 3A	12.97	6.60	-	29.99	-	14.46	8.07
Alternative 4	16.04	6.08	15.41	-	8.42	12.01	-
Alternative 7	5.11	6.60	15.41	-	8.42	16.45	5.96
	De	etained F	low Sumi	mary			
Outfall	SJC	JR1	JR2	JR3	MC	WC1	WC2
2-Year Storm, flow	(cfs)						
Alternative 1	1.00	28.00	2.00	17.50	6.71	40.00	4.62
Alternative 3A	1.00	29.21	-	17.50	-	40.00	4.66
Alternative 4	1.00	28.94	2.00	-	6.71	40.00	-
Alternative 7	1.00	29.21	2.00	-	6.71	40.00	3.46
10-year Storm, flow	(cfs)						
Alternative 1	1.00	28.00	2.00	29.99	8.03	40.00	7.96
Alternative 3A	1.00	30.13	-	29.99	-	40.00	8.07
Alternative 4	1.00	29.62	2.00	-	8.03	40.00	-
Alternative 7	1.00	30.13	2.00	-	8.03	40.00	5.96

MC = Midas Creek at 11500 South WC1 = Willow Creek at 11400 South

WC2 = Willow Creek at 12600 South

JR2 = Jordan River at 11400 South

JR3 = Jordan River at 12300/12600 South SJC = South Jordan Canal at 1500 West

JR1 = Jordan River at 10600 South

URS Corporation 756 East Winchester Street Suite 400 Salt Lake City, UT 84107

Tel: 801.904.4000 Fax: 801.904.4100

	Un-Dataine	Un-Detained Flow (cfs)			Dodained	(0)07,000			
Segment		(612)	r		Detailled Flow (CIS)	TOW (CIS)			True of Class
	2 yr	10 yr	Pond (2yr)	Pond (10yr)	Direct (2yr)	Direct (2yr) Direct (10yr)	Total 2yr	Total 10yr	Mod of Flow
South Jordan Canal (SJCa)	7,61	12.97	1	-			1.0	1.0	1.0 Pond
100 Sec. 200 Sec. Com 200 Sec. Com	2.91	5.11	-	-			1.0	10	10 Pond
Jordan River at 10600 South (JR1a)	2.62	4.47	28	42	,		28.0	28.0 Pond	Pond
Jordan River at 10600 South (JR1b)	3.83	6.60	28	42	1.21	2.13	2.62	30.1	30.1 Pond and direct dischage from East
Additional Application South (JR) et :-	3.56	6.08	28	42	0.94	1.62	28.9	29.6	29.6 Pond and direct dischara from East
Jordan River at 1.1400 South (JR2)	8.82	15,41	2	2	,		2.0	2.0	2.0 Two Ponds
	17.50	29.99	13.91	23.76	3.59	6.23	17.5	30.0	Pond (flow shown is only from our project as the flow released from the pond is actually 30.0 greater than what our project contributes) from East Discharge through Oil Water Sanarator from Wast
Midas Creek Total (MCT)	4.91	8.42	5	5	1.71	3.03	6.7	8.0	8.0 Ponds & 1 Area of Direct Discharge
Willow Creek at 11400 South (WC1a)	9.28	16.04	40	40	·		40.0	40.0 Pond	puod
	8.32	14.46	40	40		,	40.0	40.0 Pond	puo _C
	6.92	12.01	40	40			40.0	40.0 Pond	bood
10 0 0 1 1 1 1 1 0 0 0 0 0 0 0 V 0 0 0 0	9.43	16.45	40	40	,		40.0	40.0 Pond	Pood
Willow Creek at 12300 South (WC2a)	4.62	7.96	3.41	5.86	1.21	2.10	4.6	8.0	Pond (flow shown is only from our project as the flow released from the pond is actually dependent than what our project contribution) is Discontinuous of the pond is actually
THE STATE OF THE STATE OF THE STATE OF THE	4.66	8.07			4.66	8.07	4.7	8.1	8.1 Direct Discharge fr. East
(CT) (CT) (CT) (CT) (CT) (CT) (CT) (CT)	3.46	5.96			3.46	5.96	3.5	0.9	6.0 Direct Discharge fr. East

Break-down of Flows for Each Alternative at Each Outfall

	Undetaine	d Flow Summ	ary for E	ach Alternative	or the 2	Undetained Flow Summary for Each Alternative for the 2 Year Flow (cfs)	
	SJC	JR1	JR2	JR3	ΨÇ	WC1	WC2
Alternative 1	7.61	2.62	8.82		4.91	9.28	4.62
Alternative 3A	7,61	3.83				THE RESERVE OF THE PARTY OF THE	10 Sept. 10
Alternative 4		#95°C	8.82	,	4.91		
Alternative 7		3.83	8.82		4.91		大阪 100 mm 100

	Undetained	Flow Summ	ary for Ea	Undetained Flow Summary for Each Alternative for the 10 Year Flow (cfs)	or the 10	fear Flow (cfs)	
	SUC	JR1	JR2	JR3	ΜC	WC1	WC2
Alternative 1	12.97	4.47	15.41	100 CO	8.42	16.04	7.96
Alternative 3A	12.97	09'9		200000		March Sept. Sept. Sept.	September 1
Alternative 4		809	15.41		8.42		
Alternative 7	ジャラ 大学	6.60	15.41	·	8.42	200	The second second

	WC2	4.62	6,555		
r Flow (cfs)	WC1	40.00	12 100 C 30 00 00 00 00 00 00 00 00 00 00 00 00	Particular (Special Control of Co	4.0500
or the 2 Yea	MC	6.71		6.71	6.71
Detained Flow Summary for Each Alternative for the 2 Year Flow (cfs.)	JR3	San	6		·
ry for Each	JR2	2.00	,	2.00	2.00
low Summa	JR1	28.00	29,21	7.28,94	29.21
Detained F	Sac	1.00	1.00	200	
		Alternative 1	Alternative 3A	Alternative 4	Alternative 7

Alternative 7		29.21	2.00		6.71	200000000000000000000000000000000000000	September 1
	Detained F	low Summar	y for Each	Detained Flow Summary for Each Alternative for the 10 Year Flow (cfs)	the 10 Ye	ar Flow (cfs)	
	SAC	JR1	JR2	JR3	MC	WC1	WC2
Alternative 1	1.00	28,00	2.00	100 Carte Carte	8.03	40.00	7.96
Alternative 3A	1.00	30,13				ANAMONO SANA	30.08
Alternative 4	-	29.65	2.00		8.03	100 00 00 00 00 00 00 00 00 00 00 00 00	,
Alternative 7		30.13	2.00		8,03	100 CO. C. C.	書の世界のの見るで

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Controot	Outfall				Exi	Existing	7 E 8E 586	All Atternatives	natives
10400 S. Bampetter Hwy, To Featwood Rd. 16400 B. 16400 C. 16400 B.	Code	Corridor	Section					Max Additional Length	Max Additional Area
10 ct of the color 10 ct o				Length	X-Width	sq.ft.	acres	tt t	acres
10400 S; W End of Proposed Design to Redwood Rd. 1822 50 51150 2.09 1.824	SJC	1	10400 S: Bangerter Hwy. To Redwood Rd.	10640	90	532,000	12.21	10,640	19.54
104001/1650 S. Recknood Rd. to E. End of Proposed Design 10434 106 04 25.39 2.887 1.757	SJC	1	10400 S; W. End of Proposed Design to Redwood Rd.	1823	50	91,150	2.09	1,824	3,35
1,188.00 SEQUITORE SEQUIT GRADON S. 10 10800 S. 10	JR1	10400/10600 S	10400/10600 S: Redwood Rd. to E. End of Proposed Design	10434	106	1,106,004	25.39	2,683	6.66
15600 St. Spul (reduce bridge) from the print of of Dec. 2266 150 454, 160 9.28 150	JR1	Jordan Gateway / Lone Peak Pkwy	/ Jordan Gateway: 10600 S. to 10800 S	1,188.00	85	100,980	2:32	1,188	1.23
Its Readway to Peak Park May 11400 S, North to end of Dee 5256 160 0.22 5.256 160 0.22 5.256 160 0.22 5.256 160 0.22 5.256 160 0.22 5.256 160 0.22 5.256 160 0.22 160 0.22 5.256 160 0.22 160 0.22 1.250	JR1	Other	10600 S: Spui (include bridge here and not in 115)	pesn	shape	1,120,138	25.71		00 0
CHEW-Harrow) 11400 S; Across Jurdan River 1200 W to 700 350 28 9,800 0.22 5,216 14,000 11,390 14,000 11,390 14,000 11,390 14,000	JR1	Other	115 Roadway from ramp gores at 11400 S. North to end of Des	2526	160	404,160	9.28	2,526	1,86
600 S 11200U SSLC WEST 6200 80 486 000 1139 6200 600 S 12200U72800 S.S.CIC 1300 WEST 1500 80 1440000 3.03 12.00 600 S 12200U72800 S.S.LIC 1300 WEST 2200 60 3.03 2.200 600 S 1220U72800 S.S.LIC 1300 WEST 5100 60 439,000 10.06 5.100 600 S 1220U72800 S.RIA PR REAST 750 80 3.07 7.50 10.00 600 S 1220U72800 S.RIA Millow Creek EAST 750 80 6.10 7.50 7.50 600 S 11000 S. Lindenpas 11000 S. Lindenpas 1160 5.9.75 6.9.310 1.50 7.50 1100 S. Lindenpas 1100 S. Lindenpas 1160 S. Lindenpas 1160 5.9.75 6.9.310 1.50 7.468 110 Seign Also include 11400 S. Iron State St. Lood Gateway to 600 W. used shapes 25.656 B. 6.79 2.168 2.468 11800 S. Overpass 11800 S. to 11400 S. 10.1000 S. 11400 S. 11400 S. 11400 S. <td>JR2</td> <td>11400 S</td> <td>dan River 1200</td> <td>350</td> <td>28</td> <td>9,800</td> <td>0.22</td> <td>5,216</td> <td>11.51</td>	JR2	11400 S	dan River 1200	350	28	9,800	0.22	5,216	11.51
1200 1200	JR3	12300/12600 S	12300/12600 S; 2700 to SJC WEST	6200	80	496,000	11.39	6.200	7 12
12500/12000 S.1300 to the RVEST 2000 to the Color 12000 to the Col	JR3	12300/12600 S	12300/12600 S; SJC to 1300 WEST	1800	80	144,000	3.31	1.800	202
1200 S 1200 O	JR3	12300/12600 S	12300/12600 S: 1300 to JR WEST	2200	09	132,000	3.03	2,200	3.54
12200/12600 S. H O RR LAST	JR3	12300/12600 S	12600 S: Bangerter Hwy. To 2700 WEST	7300	09	438,000	10.06	7,300	11.73
	8	12300/12600 S	12300/12600 S: JR to RR EAST	5100	9	306,000	7.02	5,100	8.20
Intervigation	JR3	12300/12600 S	12300/12600 S: RR to Willow Creek EAST	750	06	67,500	1.55	750	69 0
11000 S Underpass 11000 S. Underpass 11000 S. Underpass 11000 S. Underpass 11000 S. Underpass 11500 S.	MC	11400 S		7950	39.07	310,607	7.13	7.950	10.76
115 Interchg at 11400 S. fr Ramp Gores on N to S end of Design. Also include 11400 S. fr Ramp Gores on N to S end of Design. Also include 11400 S from State St. to Jordan Gateway to 600 W. used shapes 295,628 6.79 1.682 2.00 3,254 11800 S Overpass	VC1	Other		1160	59.75	69.310	1.59	2 468	9.26
NEW-Natrow_Shorter) 11400 S: Jordan Gateway to 600 W. used shape 87,319 2.00 3,254 11800 S Overpass 11800 S to 11400 S: Doring to 11400 S. Doring t	VC1	Other	115 Interchg at 11400 S. fr Ramp Gores on N to S end of Design. Also include 11400 S from State St. to Jordan Gateway	pesn	shapes	155,482	3.57		5.58
11800 S Overpass	VC1	11400 S		pesn	shape	87,319	2.00	3,254	5.32
self State St. 11800 S. to 11400 S. used shapes 295,628 6.79	Ϋ́	Other	11800 S Overpass	na	na	0	0.00	1.622	2.49
ateway / Lone Peak Pkwy Jordan Gateway: 11400 S. north to 11000 S. used shape 223,107 5.12 2,673 ateway / Lone Peak Parkway: 11800 S. to 11400 S. used shape 140,028 3.21 2,626 set State St: 11800 S. to 12300 S. used shape 199,305 4.58 3,953 steway / Lone Peak Pkwy Lone Peak Parkway: 11800 S. to 12300 S. used shape 209,121 4.80 3,754 500 S 12200 S: 115 to Willow Creek Crossing used shape 226,969 5.21 2,626 Total Percentage Increase in Area	VC1	State Street	State St: 11800 S. to 11400 S.	pesn	shapes	295,628	6.79		5.91
steway / Lone Peak Pkwy Lone Peak Parkway: 11800 S. to 11400 S. to 11400 S. used shape 140,028 3.21 2,626 stel State St: 11800 S. to 12300 S. to 12300 S. to 12300 S. to 12300 S. to 12300 S. 3,754 3,754 steway / Lone Peak Pkwy Lone Peak Pkwy Lone Peak Pkwy Loso S: 115 to Willow Creek Crossing used shape 226,969 5.21 2,626 steway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. TOTAL 163.22 163.22	VC1	Jordan Gateway / Lone Peak Pkwy	Jordan Gateway: 11400 S. north to 11000 S.	pesn	shape	223,107	5.12	2,673	2.86
### State St: 11800 S. to 12300 S. #### steway / Lone Peak Parkway: 11800 S. to 12300 S. #### steway / Lone Peak Parkway: 11800 S. to 12300 S. #### steway / Lone Peak Parkway: 11800 S. to 12300 S. #### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. #### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. #### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. #### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. #### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. #### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. #### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. #### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. #### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. #### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. #### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. #### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. #### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. #### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. #### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. #### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. #### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. ### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. ### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. ### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. ### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. ### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. ### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. ### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. ### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. ### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. ### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. ### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. ### steway / Lone Peak Pkwy Jordan Gateway: 10800 S. ### steway / Lone Peak	VC1	Jordan Gateway / Lone Peak Pkwy	Lone Peak Parkway: 11800 S. to 11400 S.	pesn	shape	140,028	3.21	2,626	4.62
ateway / Lone Peak Pkwy Lone Peak Parkway: 11800 S. to 12300 S. Lone Peak Pkwy Lone Peak Pkwy Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. used shape shape 226,969 5.21 2,626 Canal	VC2	State Street		pesn	shape	199,305	4.58	3,953	7.22
300 S 12300 S: I15 to Willow Creek Crossing used shape 336,325 7.72 -	VC2	Jordan Gateway / Lone Peak Pkwy	2300	pesn	shape	209,121	4.80	3,754	6.40
Sanal Canal A contract of the Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. TOTAL Fercentage Increase in Area Canal	VC2	12300/12600 S	12300 S: 115 to Willow Creek Crossing	pesn	shape	336,325	7.72	ī	1,59
Canal	ətland	Jordan Gateway / Lone Peak Pkwy	Jordan Gateway: 10800 S, to 11000 S.	pesn	shape	226,969	5.21	2,626	2.63
Canal			TOTAL				163.22		
es: > South Jordan Canal - Midas Creek - Using Creek - Willow Creek	ľ		Percentage Increase in Area			.,			
	es: - Sc - Mic - Jord - Wir	buth Jordan Canal Jas Creek Jan River Ilow Creek							

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Existing

Notes; SJC - South Jordan Canal MC - Midas Creek JR - Jordan River WC - Willow Creek USLC - Utah and Satt Lake Canal

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10400/10600 S 10x	Section	2					
		EXISTING		7.0	rroposed		Additional
S		(acres)	Length (ft)	X-Width (ft)	sq.ft.	(acres)	(acres)
S	10400 S: Bangerter Hwy. To Redwood Rd.	12.21	10640	130	-	31.75	19.54
	100 S: W. End of Proposed Design to Redwood Rd.	•	,	٠	ļ	-	
10400/10600 S	10400/10600 S: Redwood Rd. to E. End of Proposed Design	25.39	2683	130	1,395,985	32.05	99.9
vay / Lone Peak Pkwy Jor	Jordan Gateway / Lone Peak Pkwy Jordan Gateway: 10600 S. to 10800 S	·	/2//	135			
7							•
901	= 1.			·	,	1	•
(N)	115 Hoadway from ramp gores at 11400 S. North to end of Des (NEW-Narrow) 11400 S: Across Jordan River 1200 W to 700 W	0.22	5216	. 86	511,168	11.73	11.51
12300/12600 S	12300/12600 S: 2700 to SJC WEST	11.39	6200	130	808,000	18 50	7 10
	12300/12600 S: SJC to 1300 WEST	3.31	1800	130	234 000	5.37	202
	12300/12600 S: 1300 to JR WEST	3.03	2200	130	286,000	6.57	2.57
12300/12600 S 126	12600 S: Bangerter Hwy. To 2700 WEST	10.06	7300	130	949,000	21.79	11 73
	12300/12600 S: JR to RR EAST	7.02	5100	130	663,000	15.22	06.8
12300/12600 S 123	12300/12600 S: RR to Willow Creek EAST	1.55	750	130	97.500	2.24	0.69
(NE	(NEW-Narrow) 11400 S: 2700 W. to 1200 W.	7.13	7950	86	779.100	17.89	10.76
110		1.59	2468	77.31	190,801	4.38	9 79
115 Des Gat	115 Interchg at 11400 S. fr Ramp Gores on N to S end of Design. Also include 11400 S from State St. to Jordan Gateway	•	t	1	í		i '
(NE	(NEW-Narrow_Shorter) 11400 S: Jordan Gateway to 600 W.	2.00	3254	86	318,892	7.32	5.32
118	11800 S Overpass	00.00	1622	67	108,674	2.49	2 49
Stat	State St: 11800 S. to 11400 S.	6.79	pesn	shape	553,105	12.70	5.91
ay / Lone Peak Pkwy Jord	Jordan Gateway / Lone Peak Pkwy Jordan Gateway: 11400 S. north to 11000 S.	٠	ť	•	•	,	,
Jordan Gateway / Lone Peak Pkwy Lone Peak Par	Peak Parkway: 11800 S. to 11400 S.	1	,	,	٠	,	ı
Stat	State St: 11800 S. to 12300 S.	4.58	3953	130	513,890	11.80	7.22
Jordan Gateway / Lone Peak Pkwy Lone Peak Par	Peak Parkway: 11800 S. to 12300 S.		·				
12300/12600 S 1230	12300 S: 115 to Willow Creek Crossing	7.72	pesn	shape	405,770	9.32	1.59
Wetland Jordan Gateway / Lone Peak Pkwy Jordan Gatewa	an Gateway: 10800 S. to 11000 S.		·	,	·	,	
	TOTAL	103.99				211.11	107:12
	Percentage Increase in Area				1		103.0%

EXISTING AND PROPOSED AREAS BY ROADWAY SECTION FOR ALTERNATIVES

Flow Calculation (May0304).xls, Existing and Proposed Total

Helin					Alternative 3A	ative 3A		\$ 3.50 A
العام	Corridor	Section	Existing		Pro	Proposed		Additional
2000			(acres)	Length (ft)	X-Width (ft)	sq.ft.	(acres)	(acres)
SJC	10400/10600 S	10400 S: Bangerter Hwy. To Redwood Rd.	12.21	10640	130	1,383,200	31.75	19.54
SJC	10400/10600 S	10400 S; W. End of Proposed Design to Redwood Rd.	í		1	,	,	
JR1	10400/10600 S	10400/10600 S: Redwood Rd. to E. End of Proposed Design	25.39	2683	130	1,395,985	32.05	99'9
				7227	135			
JR1	Jordan Gateway / Lone Peak Pkwy Jordan Gat	Jordan Gateway: 10600 S. to 10800 S	2.32	1188	130	154,440	3.55	1.23
JR1	Other	10600 S: Spui (include bridge here and not in 115)	25.71	nsed	shape	1,116,478	25.63	-0.08
JR1	Other	115 Roadway from ramp gores at 11400 S. North to end of Des				-		
JR2	11400 S	(NEW-Narrow) 11400 S: Across Jordan River 1200 W to 700 W	ı	,	1	,	,	,
JR3	12300/12600 S	12300/12600 S: 2700 to SJC WEST	11.39	6200	130	806,000	18.50	7.12
JR3	12300/12600 S	12300/12600 S; SJC to 1300 WEST	3.31	1800	130	234,000	5.37	2.07
	12300/12600 S	12300/12600 S: 1300 to JR WEST	3.03	2200	130	286,000	6.57	3.54
	12300/12600 S	12600 S: Bangerter Hwy, To 2700 WEST	10.06	7300	130	949,000	21.79	11.73
1	12300/12600 S	12300/12600 S: JR to RR EAST	7.02	5100	130	000'899	15.22	8.20
JR3	12300/12600 S	12300/12600 S: RR to Willow Creek EAST	1.55	750	130	97,500	2.24	69.0
MC	11400 S	(NEW-Narrow) 11400 S: 2700 W. to 1200 W.	ı			,	ı	ť
WC1	Other	11000 S Underpass	1.59	2468	77.31	190,801	4.38	2.79
WC1	Other	115 Interchg at 11400 S. fr Ramp Gores on N to S end of Design. Also include 11400 S from State St. to Jordan Gateway	•	•	ı	ı	-	
WC1	11400 S	(NEW-Narrow_Shorter) 11400 S; Jordan Gateway to 600 W.	•	·	e	•	·	
WC1		11800 S Overpass	0.00	1622	49	108,674	2.49	2.49
WC1	State Street	State St: 11800 S. to 11400 S.		-	-	ţ		
WC1	Jordan Gateway / Lone Peak Pkwy	Jordan Gateway / Lone Peak Pkwy Jordan Gateway: 11400 S. north to 11000 S.	5.12	2673	130	347,490	7.98	2.86
WC1	Jordan Gateway / Lone Peak Pkwy Lone Peak	Lone Peak Parkway: 11800 S. to 11400 S.	3.21	2626	130	341,380	7.84	4.62
WC2	State Street	State St: 11800 S. to 12300 S.			-	1		ľ
WC2	Jordan Gateway / Lone Peak Pkwy Lone Peak	Lone Peak Parkway: 11800 S. to 12300 S.	4.80	3754	130	488,020	11.20	6.40
WC2	12300/12600 S	12300 S: 115 to Willow Creek Crossing	7.72	4	·	405,770	9.32	1.59
etland	Jordan Gateway / Lone Peak Pkwy	Wetland Jordan Gateway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S.	5.21	2626	130	341,380	7.84	2.63
		TOTAL	129.65				213.71	81,43
		Percentage Increase in Area					i	62.8%
Notes: SJC - So MC - Mid JR - Jord WC - Wil	Notes: SJC - South Jordan Canal MC - Midas Creek JR - Jordan River WC - Willow Creek							
י - טקא	USEC - Utan and Salt Lake Canal							

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Existing

Section Existing	Decidion Excitation Excit	Outfall		:			Altern	Alternative 4		
Bangerter Hwy, To Redwood Rd. Cacres Length (ff) X-Width (ff) Sa,11, Gares Cacres Cacr	10400 S. Bangerter Hwy, To Fleatwood Rd. Carres Length (ff) X-Width (ff) 10400 S. Bangerter Hwy, To Fleatwood Rd. 2 09 1824 130 10400 S. W. End of Proposed Design to Redwood Rd. 2 09 1824 130 10400 S. W. End of Proposed Design to Redwood Rd. 2 09 1824 130 10400 S. W. End of Proposed Design to Redwood Rd. 2 09 1824 130 10400 S. Did from the Redwood Rd. 2 09 1824 130	Code	Corridor	Section	Existing			pesoc		Additional
March Control of Hardwood Rd. 2.09 1824 130 237,120 5,44	1980 S	1	0 0000		(acres)	Length (ft)			(acres)	(acres)
W. End of Proposed Design to Redwood Rd. 2.09 1824 130 237,120 5,44 900 S. Redwood Rd. to E. End of Proposed Design to Redwood Rd. to E. End of Proposed Design to Redwood Rd. to E. End of Proposed Design 2.5.71 used 1395,986 32.05 Pgbul (reduce bridge-hore soft out 11 1400 S. Across Jordan River 1200 W to 700 2.25.71 used 116,478 2.5.63 Pgbul (reduce bridge-hore soft out 11 1400 S. Across Jordan River 1200 W to 700 0.22 2.5.71 used 116,478 2.5.63 Town 11400 S. Across Jordan River 1200 W to 700 0.22 2.5.71 used 11,16,478 11,73 Town 11400 S. Across Jordan River 1200 W to 700 0.22 2.5.71 1.58 11,73 Town 11400 S. 2700 W EST 1.00 S. Across Jordan River 1200 W to 700 2.25 1.00 S. Across Jordan River 1200 W to 700 1.00 S. Across Jordan River 1400 W to 700 2.57 1.00 S. Across Jordan River 1400 W to 700	1900 2.09 1824 130 1900 1	- 1	10400/10600 S		,	-		1	٠	
teway: 10600 S. to 10800 S above the total of Proposed Design 126.39	Gateway Lone Peak Pkwy Jorden Gateway 10600 S. to 10800 S.	1	10400/10600 S		2.09	1824	130	237,120	5.44	3.35
Spui (melude bridge hee and notin 115) 25.71 used shape 1,116,478 25,633 row) 11400 S. Across Jordan River 1200 W to 700 0.22 511,168 11.73 11.73 100 S. 2700 to SJC WEST 1.10 S. Mcross Jordan River 1200 W to 700 0.22 511,168 11.73 100 S. SJC to 104 WEST 1.100 W. SJC to 104 WEST 1.100 W. SJC to 104 WEST 1.100 W. SJC to 104 WEST 1.100 S. To 104 W. To 104	Gateway / Lone Peak Pkwy Jordan Gateway; 10600 S. Equi (melude bridge) here and notin its) 10600 S. Spul (melude bridge) here and notin its) 10600 S. Spul (melude bridge) here and notin its) 118 Roadway / Tom Tamp goes at 11400 S. North to end of Dee 9.28 25.26 192 192 19200 S. Spot to SLC WEST 12200 / 12600 S. Spot to 1300 to JR WEST 12200 / 12600 S. Spot to 1300 to JR WEST 12200 / 12600 S. Spot to 1300 to JR WEST 12200 / 12600 S. Spot to JR ME EAST 12200 / 12600 S. Spot to JR ME EAST 12200 / 12600 S. Spot to JR Method S. 2700 W. to Jz 00 W. 2.00 3.54 98 11000 S. Underpass 11000 S. Un	JR1	10400/10600 S	10400/10600 S: Redwood Rd. to E. End of Proposed Design	25.39	2683	130	1,395,985	32.05	99.9
110 110	10600 Si Spui meuba bridga hare and neth n 15 10600 Si Spui meuba bridga hare and neth n 15 10600 Si Spui meuba bridga hare and neth n 15 10600 Si North to end of Dee 9,28	JR1	Jordan Gateway / Lone Peak Pkwy	Jordan Gateway: 10600 S. to 10800 S	,		,	ı		
row 11400 S. Across Jordan River 1200 W to 700 2.26 1.52 444,992 1.1.13 row) 11400 S. Across Jordan River 1200 W to 700 0.22 5.56 192 444,992 1.1.13 row) 11400 S. Across Jordan River 1200 W to 700 0.22 5.11,168 11.73 1.1.73 row 5. S.Uc to 1300 WEST rob S. JR to RR EAST <td> 115 Roadway from ramp gorse at 11400 S. North to end of Deg 9.28 25.56 192 V W Warrow) 11400 S. Across Jordan River 1200 W to 700 0.22 12300/12600 S. 2700 to S.JC WEST 12300/12600 S. 3.C0 to 1300 WEST 12300/12600 S. 3.D to HRI B.AST 12300/12600 S. AR to HRI B.AST 12300/12600 S. AR to HRI B.AST 12300/12600 S. AR to HRI B.AST 12300/12600 S. TR to WHI B.AST 12300/12600 S. TR to Will Work 1200 W. 2.00 3254 98 12300/12600 S. TR to Will Work 1200 S. Tr Tamp Gores on N to S. dordan Gateway 1400 S. to 1400 S. to 1400 S. 12300 S. to 12300 S.</td> <td>JR1</td> <td>Other</td> <td>10600 S: Spuj (include bridge here and not in 115)</td> <td></td> <td>70001</td> <td>choro</td> <td>1 116 170</td> <td>05.50</td> <td>90</td>	115 Roadway from ramp gorse at 11400 S. North to end of Deg 9.28 25.56 192 V W Warrow) 11400 S. Across Jordan River 1200 W to 700 0.22 12300/12600 S. 2700 to S.JC WEST 12300/12600 S. 3.C0 to 1300 WEST 12300/12600 S. 3.D to HRI B.AST 12300/12600 S. AR to HRI B.AST 12300/12600 S. AR to HRI B.AST 12300/12600 S. AR to HRI B.AST 12300/12600 S. TR to WHI B.AST 12300/12600 S. TR to Will Work 1200 W. 2.00 3254 98 12300/12600 S. TR to Will Work 1200 S. Tr Tamp Gores on N to S. dordan Gateway 1400 S. to 1400 S. to 1400 S. 12300 S. to 12300 S.	JR1	Other	10600 S: Spuj (include bridge here and not in 115)		70001	choro	1 116 170	05.50	90
row) 11400 S. Across Jordan River 1200 W to 700 0.22 511,168 11.73 500 S. 2700t o SJC WEST 500 S. 3L0 to 1300 WEST 500 S. JSUC to 1300 WEST 500 S. JR to Willow Creek EAST 500 S. JR to Willow Creek EAST 5 at 1400 S. 10 Memay 15 so include 11400 S. 10 Memay 16 so include 11400 S. 10 Memay 16 so include 11400 S. 10 11400 S. 1800 S. 10 11400 S. <	VivEw.Natrow) 11400 S: Across Jordan River 1200 W to 700 0.22 W W W W W W W W W	JR1	Other	115 Roadway from ramp gores at 11400 S. North to end of Des		2526	192	484 992	11 13	90.0g
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Sangerter Hwy, To 2700 WEST Cook Sufficient to the REAST Cook Sufficient to Willow Creek EAST Cook Sufficient to W. Send of Sufficient to Willow Creek Crossing Cook Sufficient to Willow Sufficient to Willow Sufficient Sufficient to Willow Sufficient Suffici	12600 S. 12600 S.			12300/12600 S: 1300 to JR WEST	1			·		. .
00 S. JR to RR EAST 000 S. JR to RR EAST 17.89	12300/12600 S. IR to RR EAST 12300/12600 S. IR to Willow Creek CAST 12300/12600 S. IR to Willow Creek On N to S end of It Interchap at 11400 S. To Ramp Gores on N to S end of Galeway 115 Interchap at 11400 S. Ir Ramp Gores on N to S end of Galeway 115 Interchap at 11400 S. Jordan Gateway to 600 W 2.00 3254 98 28 29 29 29 29 29 29	- 1		12600 S: Bangerter Hwy. To 2700 WEST	-	-	·			
row) 11400 S: 2700 W. to 1200 W. 7.13 7950 98 779,100 17.89 row) 11400 S: 2700 W. to 1200 W. 7.13 7950 98 779,100 17.89 roderpass g at 11400 S. from State St. to Jordan 3.57 Used Shapes 398,344 9.14 row_Shorter) 11400 S: from State St. to Jordan Gateway to 600 W. 2.00 3254 98 318,892 7.32 Verpass 1800 S: to 11400 S. 2.00 3254 98 318,892 7.32 Parkway: 11800 S. to 11400 S. 2.00 3254 98 318,892 7.32 Parkway: 11800 S. to 12300 S. 2.00 3.54 98 318,892 7.32 Foto Willow Creek Crossing 2.00 3.54 98 318,892 7.32 Foto Willow Creek Crossing 3.57 3.54 3.18,892 7.32 Foto Willow Creek Crossing 3.57 3.54 3.18 3.18 3.14 3.14 Foto Willow Creek Crossing 3.54 3.18 3.18,892 7.32 3.22 Foto Willow Creek Crossing 3.54 3.18 3.18 3.18	12300/12600 S. RR to Willow Creek EAST 1.0300/12600 S. RR to Willow Creek EAST 1.000 S. Underpass 115 Interchig at 11400 S. 1700 M. to 1200 W. 2.00 3.57 Used Shapes Shapes Shapes Shapes Shapes Shapes Shapes Shapes Shapes	JR3		12300/12600 S: JR to RR EAST	,					ŀ
row) 11400 S. 2700 W. to 1200 W. 7.13 7950 98 779,100 17.89 nderpass 11400 S. fr Ramp Gores on N to S end of Iso include 11400 S from State St. to Jordan 3.57 Used Shapes 398,344 9.14 row_Shorter) 11400 S. Jordan Gateway to 600 W. 2.00 3254 98 318,892 7.32 verpass 1800 S. to 11400 S. - - - - teway: 11400 S. north to 11000 S. - - - - Parkway: 11800 S. to 12300 S. - - - - 1800 S. to 12300 S. - - - - 5 to Willow Creek Crossing - - - - eway: 10800 S. to 11000 S. - - - - TOTAL 75.41 - - - -	(NEW-Narrow) 11400 S. 2700 W. to 1200 W. 7.13 7950 98 11000 S Underpass 115 Interchg at 1400 S from State St. to Jordan 3.57 Used Shapes 3.64 98 3.64 38 3	JR3	12300/12600 S	12300/12600 S: RR to Willow Creek EAST	-		,	,		
Inderpass g at 11400 S. fr Ramp Gores on N to S end of g at 11400 S. fr Ramp Gores on N to S end of g at 11400 S. from State St. to Jordan Tow.Shorter) 11400 S. Jordan Gateway to 600 W. 2.00 3254 98 318,892 7.32 series 1800 S. to 11400 S. morth to 11000 S. to 11400 S. to 11400 S. to 12300 S. to 11400 S. to 12300 S.	11000 S Underpass 11000 S Underpass 115 Interchig at 11400 S. fr Ramp Gores on N to S end of Gateway Also include 11400 S from State St. to Jordan 3.57 Used Shapes 2 2 2 2 2 2 2 2 2		11400 S	(NEW-Narrow) 11400 S: 2700 W. to 1200 W.	7.13	7950	86	779,100	17.89	10.76
g at 11400 S. fr Ramp Gores on N to S end of Iso include 11400 S from State St. to Jordan 3.57 Used Shapes 398,344 9.14 row_Shorter) 11400 S. Jordan Gateway to 600 W. 2.00 3254 98 318,892 7.32 Verpass Verpass 3.00 3.00 3.00 3.00 3.00 3.00 3.00 Ieway: 11400 S. to 11400 S. 11400 S. to 11400 S. 11400 S. 11400 S. 11400 S. 11400 S. 11400 S. 11500 S.	15 Intercha at 11400 S. fr Ramp Gores on N to S end of Design. Also include 11400 S from State St. to Jordan Gateway to 600 W. 2.00 3254 98 Stateway		Other	11000 S Underpass					2011	67.5
row_Shorter) 11400 S: Jordan Gateway to 600 W. 2.00 3254 98 318,892 7.32 verpass 1800 S; to 11400 S.	Canal Cana	i			3.57	Used	Shapes	398,344	9.14	5.58
Verpass Verpass 1800 S, to 11400 S. . 1800 S, to 11400 S. . Parkway: 11800 S. to 12300 S. . Parkway: 11800 S. to 12300 S. . 5 to Willow Creek Crossing . eway: 10800 S. to 11000 S. . TOTAL 75.41 Percentage Increase in Area 120.34	11800 S Overpass 11800 S. to 11400 S.			(NEW-Narrow_Shorter) 11400 S: Jordan Gateway to 600 W.	2.00	3254	86	318,892	7.32	5.32
1800 S. to 11400 S.	Gateway / Lone Peak Pkwy State St: 11800 S. to 11400 S.		Other	11800 S Overpass		,			Ĭ.	
leway: 11400 S. north to 11000 S. Parkway: 11800 S. to 11400 S. 1800 S. to 12300 S. Parkway: 11800 S. to 12300 S. 5 to Willow Creek Crossing eway: 10800 S. to 11000 S. TOTAL Percentage Increase in Area	Gateway / Lone Peak Pkwy Jordan Gateway: 11400 S. north to 11000 S. Gateway / Lone Peak Pkwy Lone Peak Parkway: 11800 S. to 12300 S. Sateway / Lone Peak Pkwy Lone Peak Parkway: 11800 S. to 12300 S. 2600 S 12300 S. 115 to Willow Creek Crossing Sateway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. TOTAL Total Total Total		State Street	State St: 11800 S, to 11400 S.			-	ŀ	 -	
Parkway: 11800 S. to 11400 S. 1800 S. to 12300 S. Parkway: 11800 S. to 12300 S. S to Willow Creek Crossing eway: 10800 S. to 11000 S. TOTAL Percentage Increase in Area 120.34	Gateway / Lone Peak Parkway: 11800 S. to 11400 S. . to 11400 S. . to 11400 S.		Jordan Gateway / Lone Peak Pkwy	Jordan Gateway: 11400 S. north to 11000 S.		,	·			
1800 S. to 12300 S. -	Teel State St: 11800 S. to 12300 S. -		Jordan Gateway / Lone Peak Pkwy				,			
Parkway: 11800 S. to 12300 S. . <t< td=""><td>Sateway / Lone Peak Parkway: 11800 S. to 12300 S. 2600 S 12300 S: 115 to Willow Creek Crossing Sateway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. TOTAL Percentage Increase in Area</td><td></td><td></td><td></td><td>,</td><td></td><td> </td><td>1</td><td>1</td><td> </td></t<>	Sateway / Lone Peak Parkway: 11800 S. to 12300 S. 2600 S 12300 S: 115 to Willow Creek Crossing Sateway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. TOTAL Percentage Increase in Area				,			1	1	
5 to Willow Creek Crossing -	2600 S 3ateway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. TOTAL TOTAL Percentage Increase in Area		Jordan Gateway / Lone Peak Pkwy			,	,		,	
eway: 10800 S. to 11000 S. 75.41 120.34 Percentage Increase in Area	Sateway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. TOTAL TOTAL 75.41 In Canal			12300 S: 115 to Willow Creek Crossing	-			1		
75.41	TOTAL Percentage Increase in Área in Canal	/etland	Jordan Gateway / Lone Peak Pkwy	Jordan Gateway: 10800 S. to 11000 S.		·	,			
	Percentage Increase in Área			TOTAL	75.41				12034	44.04
	<u>21es:</u> J.C - South Jordan Canal C - Midas Creek 3 - Jordan River			Percentage Increase in Area				_]	10.03	29.6%

Existing Flow Calcula

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Existing

Contidor Contidor	Outfall				:	Altern	Alternative 7		
10000 S 10000 S Bangelet House Med 2.09 1284 130 1395,985 22.05 10000 S 1000	Code	Corridor	Section	Existing (acres)	l enoth (ft)	Prog	pesed	(acros)	Additional
1000 S 1000 S W. End of Proposed Design to Redwood Rd 1509 1824 150 1235,585 22.05 2010 S 1000 O S Redwood Rd to E. End of Proposed Design 25.31 1189 150 14.440 25.65 2010 S 1000 O S Redwood Rd to E. End of Proposed Design 25.71 1889 150 14.440 25.65 2010 S 1000 O S Spul (sed-ab-nigo)-we-well and to 10 17.00	SJC		110400 S: Bangerter Hwy, To Redwood Rd.	/200	() () () () () () () () () ()	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)		(20,120)	(20102)
Cabloway Lone Peak Play London Chan Cabloway	SJC	10400/10600 S	10400 S: W. End of Proposed Design to Redwood Rd.	2.09	1824	130	237,120	5.44	3.35
Cateway Lone Peak Plwy Jordan Gateway; 10800 S. to 10800 S.	JR1	10400/10600 S	10400/10600 S: Redwood Rd. to E. End of Proposed Design	25.39	2683	130	1,395,985	32.05	99'9
10600 S. Spul (neckab briggs her each and 15) 10600 S. Spul (neckab briggs her each and 15) 11600 S. Morth to end of Dee 11.16 Alberta 11.16 Alberta	JR1	Jordan Gateway / Lone Peak Pkwy	Jordan Gateway: 10600 S. to 10800 S	2.32	1188	130	154,440	3.55	1.23
In Floadwey from earng gores at 11400 S. North to end of Dee 11,73 (NEW-Narraw) 11400 S. Across Jordan Flaver 1200 W to 700 0.22 5216 99 511,169 11,73 12600 S 12300/12600 S. S. 2700 to S. 40 WEST 1.73 12300/12600 S. S. 2700 to S. 40 WEST 1.73 12300/12600 S. S. 2700 to S. 40 WEST 1.73 12300/12600 S. S. 2700 to S. 40 WEST 1.73 12300/12600 S. Barbaraw 11400 S. 2700 WEST 1.73 12300/12600 S. Hompster Hwy. To 2700 WEST 1.73 12300/12600 S. Hompster Hwy. To 2700 WEST 1.73 1.2300 S. Undergreet Hwy. To 2700 W to 12200 W 1.2300 W to 12200 W 1.2300 W to 12200 W 1.2300	JR1	Other	10600 S: Spui (include bridge here and not in 115)	25.71	pesn	shape	1.116.478	25.63	-0.08
View-Narrow) 11400 St. Across Jordan River 1200 W to 700 0.22 5216 98 511,168 11.73 12600 S	JR1	Other	115 Roadway from ramp gores at 11400 S. North to end of Des	0)	-		-		,
1230012600 S. 20.00 to S.U.C WEST 1230012600 S. 20.00 to S.U.C but S.D.C	JR2	11400 S	(NEW-Narrow) 11400 S: Across Jordan River 1200 W to 700 W		5216	86	511,168	11.73	11.51
1200012600 S. SLC 10 1300 WEST 1200012600 S. SLC 10 1400 WEST 1200012600 S. SLC 10 WEST	JR3	12300/12600 S	12300/12600 S; 2700 to SJC WEST			·	,	,	،
12600 S 122001/2600 S : 1300 UNEST 12600 S 12500/2600 S : 1310 EAST 12600 S 12500/2600 S : 1310 EAST 12600 S : 1310 EAST 12600 S : 1310 EAST 1300 EAST	JR3	12300/12600 S	12300/12600 S: SJC to 1300 WEST	,		,			
12600 S 12300/12600 S, JR to DR EAST 12300/12600 S, JR to DR EAST 12500/12600 S, JR to DR EAST 1713 17550 17590 1789 17800 S 17800 S, JR to DR EAST 17100 E		12300/12600 S	12300/12600 S: 1300 to JR WEST		-		,	-	'
12800 S 12300/12600 S; AR to RR EAST 12300/12600 S; AR to AR AR t	- 1	12300/12600 S	12600 S: Bangerter Hwy. To 2700 WEST	1			,	,	
1000 S 123000 S 128 12	- 1	12300/12600 S	12300/12600 S: JR to RR EAST	,			,	,	
(NEW-Natrowy) 11400 S. 2700 W, to 1200 S. 11100 S. Uniderpass on N to S end of Cacteway and		12300/12600 S	12300/12600 S: RR to Willow Creek EAST	٠	·	·	-		ļ
11000 S Underpass 11600 S Underpass 11600 S Underpass 11600 S Underpass 1400 S, Ir Ramp Gores on N to S end of Gateway Lone Peak Pkwy Soverpass 11800 S Overpass 11800 S to 11400 S, Lo	MC	11400 S	(NEW-Narrow) 11400 S; 2700 W. to 1200 W.	7.13	7950	86	779.100	17.89	10.76
115 Interchg at 11400 S, fr Ramp Gores on N to S end of Gateway Lone Peak Parkway: 11400 S, Jordan Gateway to 600 W, 2,00 3254 98 318,892 7.32 11800 S Overpass	VC1	Other	11000 S Underpass	,					
State St. 1800 S. Jordan Gateway to 600 W. 2.00 3254 98 318,892 7.32 1800 S. Overpass 11800 S. Lot 11400 S. Lot 11400 S. Coverpass 11800 S. Lot 11400 S. Lot 1	VC1	Other	115 Interchg at 11400 S. fr Ramp Gores on N to S end of Design. Also include 11400 S from State St. to Jordan Gateway	٠	,	1	ı	,	,
11800 S Overpass 11800 S to 11400 S. 11800 S. 1	VC1	11400 S	(NEW-Narrow_Shorter) 11400 S: Jordan Gateway to 600 W.	2.00	3254	86	318,892	7.32	5.32
Itee State St: 11800 S. to 11400 S. St. 11800 S. to 11400 S. St. 12 2673 130 347,490 7.98 Gateway / Lone Peak Pkwy Jordan Gateway: 11800 S. to 12300 S. 3.21 2626 130 341,380 7.84 Treet State St: 11800 S. to 12300 S. 4.80 3754 130 486,020 11.20 2600 S 12300 S: 115 to Willow Creek Crossing - - - - 2600 S 12300 S: 115 to Willow Creek Crossing - - - - 2610 S 12300 S: 115 to Willow Creek Crossing - - - - 2620 S 12300 S: 115 to Willow Creek Crossing - - - - 2620 S 130 341,380 7.84 - An Canal - - - - - An Canal - - - - - - An Canal - - - - - - - An Canal - - - - - - - - - - -<	Ç	Other	11800 S Overpass	,				1	
Gateway / Lone Peak Pkwy Jordan Gateway: 11400 S. north to 11000 S. 5.12 2673 130 347,490 7.98 Gateway / Lone Peak Pkwy Lone Peak Pkwy Lone Peak Pkwy 2626 130 341,380 7.84 Ireet State St: 11800 S. to 12300 S. 4.80 3754 130 488,020 11.20 Z600 S 12300 S: 115 to Willow Creek Crossing - - - - - Bateway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. 5.21 2626 130 341,380 7.84 An Canal Forcentage Increase in Area Forcentage Increase in Area 138.22 130 341,380 7.84	Ş	State Street	State St: 11800 S. to 11400 S.				'	-	ļ.
Gateway / Lone Peak Pkwy Lone Peak Parkway: 11800 S. to 11400 S. 3.21 2626 130 341,380 7.84 Ireet State St: 11800 S. to 12300 S. 4.80 3754 130 488,020 11.20 2600 S 12300 S: 115 to Willow Creek Crossing - - - - - - 3ateway / Lone Peak Pkwy 12300 S: 115 to Willow Creek Crossing - - - - - - - 3ateway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. 5.21 2626 130 341,380 7.84 Fercentage Increase in Area An Canal	VC1	Jordan Gateway / Lone Peak Pkwy	Jordan Gateway: 11400 S. north to 11000 S.	5.12	2673	130	347,490	7.98	2.86
Treet State St: 11800 S. to 12300 S. 4.80 3754 130 488,020 11.20 2600 S 12300 S: 115 to Willow Creek Crossing -	\C1	Jordan Gateway / Lone Peak Pkwy	Lone Peak Parkway: 11800 S. to 11400 S.	3.21	2626	130	341,380	7.84	4.62
Gateway / Lone Peak Parkway: 11800 S. to 12300 S. 4.80 3754 130 488,020 11.20 2600 S 12300 S: 115 to Willow Creek Crossing -<	VC2	State Street	State St: 11800 S, to 12300 S.	_					
2600 S 12300 S: 115 to Willow Creek Crossing -<	VC2	Jordan Gateway / Lone Peak Pkwy	Lone Peak Parkway: 11800 S. to 12300 S.	4.80	3754	130	488,020	11.20	6.40
Sateway / Lone Peak Pkwy Jordan Gateway: 10800 S. to 11000 S. 5.21 2626 130 341,380 7.84 TOTAL 83.22 138.46	VC2	12300/12600 S	12300 S: 115 to Willow Creek Crossing				ļ ·		
an Canal K.	etland	Jordan Gateway / Lone Peak Pkwy	Jordan Gateway: 10800 S. to 11000 S.	5.21	2626	130	341,380	7.84	2.63
An Canal			TOTAL	83.22				138.46	52.61
S - South Jordan Canal Midas Creek - Jordan River			Percentage Increase in Area				J		63.2%
	es: - So - Mid - Jorda	uth Jordan Canal as Creek an River Iow Creek						ı	

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Interesting Duration Information						
Interior Duration	Information	L			Intensity Duration Inform	tion Infor
(South Jordan Master Plan, May 2002)	iter Plan, Ma	y 2002)			(South Jordan Master Plan	Master Pla
	€	€	€	€		€
Seconds	Minutes	2 year	10 year	100 year	Seconds	Minut
		In/h	ln/hr	in/hr		
300	5	1,992	3.504	5.256	300	9
006	15	1.192	2,144	3.556	006	-
1800	30	0.812	1.422	2.436	1800	30
2700	45	0.601	1.045	1.78	2700	45
3600	09	0.509	0.874	1.424	3600	09
7200	120	0.325	0.55	0.845	7200	120
10800	180	0.245	0.41	0.599	10800	180
21600	360	0.146	0.231	0.317	21600	360
43200	720	0.088	0.139	0.19	43200	720
86400	1440	0.049	0.079	0.109	86400	144
Rational Method Data	ata				Rational Method Data	od Data
"C" coeff.	0.85		Se	See Graphs	"C" coeff.	
Area of Infl.	6.66 Acres	Acres			Area of Infl.	
Length (ft)	10440 Feet	Feet		_	Length (ft)	
Time of Conc.	61.7 1	61.7 Minutes			Time of Conc.	
Intensity 2yr	0,463 in/hr	n/hr	i = 7,0973 t -0.6623	3 t -0.6623	Intensity 2yr	1.5
Intensity 10yr	0.789 in/hr	n/hr	$i = 13.3461^{-0.686}$	31-0.686	Intensity 10yr	2.8
Intensity 100 yr	1.223 in/hr	n/hr	$i = 24.019 t^{-0.7223}$	9 1 -0.7223	Intensity 100 yr	7.4
Add point flow	0 cfs	sts			Add point flow	
Peak Flow 2 yr	2.62 cfs	sts		•	Peak Flow 2 yr	
Peak Flow 10 yr	4.47 cfs	ifs	Q=C'I'A	_	Peak Flow 10 vr	.
Peak Flow 100 vr	6 92	9				. ;

Intensity Duration Information	on Information	-		
(South Jordan Master Plan, May 2002)	aster Plan, Ma	y 2002)		
	Ξ	€	0	€
Seconds	Minutes	2 year	10 year	100 year
		lh/hr	ln/hr	in/hr
300	5	1.992	3.504	5.256
006	15	1.192	2.144	3,556
1800	30	0,812	1.422	2.436
2700	45	0.601	1.045	1.78
3600	9	0.509	0.874	1,424
7200	120	0.325	0.55	0.845
10800	180	0.245	0.41	0.599
21600	360	0.146	0.231	0.317
43200	720	0.088	0.139	0.19
86400	4. 044	0.049	0.079	0.109

86400	0440	0.049	0.079	0.109	
tional Method Data	Data				
coeff.	0.85		S	See Graphs	
a of infl.	1.86	1.86 Acres			
oath (ft)	6526 Feet	Faat			

Rational Method Data	12	
"C" coeff.	0.85	See Graphs
Area of Infl.	1.86 Acres	
Length (ft)	6526 Feet	
Time of Conc.	42.13 Minutes	->
Intensity 2yr	0.596 in/hr	i = 7.0973 t -0.6623
Intensity 10yr	1.025 in/hr	$i = 13.346 t^{-0.686}$
Intensity 100 yr	1.611 in/hr	$i = 24.019 t^{-0.7223}$
Add point flow	0 cfs	
Peak Flow 2 yr	0.94 cfs	
Peak Flow 10 yr	1.62 cfs	Q=C*I*A
Peak Flow 100 yr	2.54 cfs	

	Inde umoe noon	<u> </u>	=		-	Jordan Gateway	VaV	
ensity Duration Information	Information				Intensity Duration Information	Information		
outh Jordan Master Plan, May 2002)	er Plan, May 20	302)			(South Jordan Mas	(South Jordan Master Plan, May 2002)		
	£	€	6	8		€	€	€
Seconds	Minutes 2	2 year	10 year	100 year	Seconds	es 2	tr 10 year	100 year
	_	ly. Ly.	In/hr	in/hr		In/hr		ir/h
300	•	1.992	3.504	5.256	300	5 1.992	3.504	5.256
006	15	1.192	2.144	3.556	006	·		3.556
1800		0.812	1.422	2.436	1800			2.436
2700		0.601	1.045	1.78	2700	45 0.601	1.045	1.78
3600		0.509	0.874	1.424	3600		•	1,424
7200		0.325	0.55	0.845	7200	120 0.32	5 0,55	0.845
10800		0.245	0.41	0.599	10800	180 0.245		0.599
21600		0.146	0.231	0.317	21600	360 0,146	Ū	0.317
43200		0,088	0.139	0.19	43200	720 0.088		0.19
86400	1440 0.	0.049	0.079	0.109	86400	_	_	0.109
tional Method Data	ata				Rational Method Data	ata		
coeff.	0.85		See	See Graphs	"C" coeff.	0.85	Seg	See Graphs
a of Infl.	0.00 Acres	Se			Area of Infl.	1.23 Acres		1
igth (ft)	0 Feet				Length (ft)	1,188.00 Feet		
ie of Conc.	9,5 Minutes	setr			Time of Conc.	15.44 Minutes		_
ensity 2yr	1.598 in/hr		i = 7.0973 t -0.6623	1-0.6623	Intensity 2yr	1.158 in/hr	i = 7.0973 t ^{-0.6623}	1-0.6623
insity 10yr	2.849 in/hr		$i = 13.3461^{-0.686}$	1 -0.686	Intensity 10yr	2.041 in/hr	$i = 13.346 t^{-0.686}$	989:0-1
insity 100 yr	4.724 in/hr	•	i = 24.019 t ^{-0.7223}	t -0.7223	Intensity 100 yr	3.327 in/hr	$i = 24.0191^{-0.7223}$	1-0.7223
I point flow	0 cfs				Add point flow	0 cfs		
IN Flow 2 yr	0.00 cfs			-	Peak Flow 2 yr	1.21 cfs		
ik Flow 100 yr	0.00 cfs		Q=0		Peak Flow 10 yr Peak Flow 100 vr	2.13 cfs 3.47 cfs	O=C*!*A	
						212		

JR1a = 104/106 JR1b = 104/106, Jordan Gateway, & 106 SPUI 3.83 6.60	FLOW (cfs)	2yr	10yr
104/106, Jordan Gateway, & 106 SPUI 3.83	R1a = 104/106	2.62	4.47
	104/106,	3.83	9.9

ster Plan, May 2002) (t) (t) (t) (t) (t) (t) (t) (t) (t) (11400 South from West	th from	West		
ster Plan, May 2002) (t) (t) (t) (t) (t) (t) (t) (t) (t) (Intensity Duration	Information				Intensity Du
Minutes 2 year 10 year 100 yea	(South Jordan Mas	ter Plan, May	, 2002)			(South Jorda
Minutes 2 year 10 year 100 year 100 year 100 linhr in/hr in/		Đ	€	(2)	(2)	
In/hr In/hr In/hr In/hr In/hr 5	Seconds	Minutes	2 year	10 year	100 year	Second
5 1.992 3.504 5.256 15 1.192 2.144 3.556 30 0.812 1.422 2.436 45 0.601 1.045 1.78 60 0.509 0.874 1.424 120 0.325 0.55 0.845 180 0.245 0.41 0.599 360 0.146 0.231 0.317 720 0.088 0.139 0.19 1440 0.049 0.079 0.109 0.85 5.75 Acres 22.54 Minutes 0.902 in/hr			In/hr	ln/hr	in/hr	
15 1.192 2.144 3.556 30 0.812 1.422 2.436 45 0.601 1.045 1.78 60 0.509 0.874 1.424 120 0.325 0.55 0.845 180 0.245 0.41 0.599 360 0.146 0.231 0.317 720 0.088 0.139 0.19 1440 0.049 0.079 0.109 5.75 Acres 22.54 Minutes 22.54 Minutes 0.902 in/hr	300	2	1.992	3.504	5.256	300
30 0.812 1.422 2.436 45 0.601 1.045 1.78 60 0.509 0.874 1.424 120 0.325 0.55 0.845 180 0.245 0.41 0.599 360 0.146 0.231 0.317 720 0.088 0.139 0.19 1440 0.049 0.079 0.109 Data 0.85 5.75 Acres 22.54 Minutes 0.902 in/hr	006	15	1.192	2.144	3.556	006
45 0.601 1.045 1.78 60 0.509 0.874 1.424 120 0.235 0.55 0.845 180 0.245 0.41 0.599 360 0.146 0.231 0.19 1440 0.049 0.079 0.109 Data 0.85 2.54 Minutes 2.54 Minutes 0.902 in/hr	1800	30	0.812	1.422	2.436	1800
60 0.509 0.874 1.424 120 0.325 0.55 0.845 180 0.245 0.41 0.599 360 0.146 0.231 0.317 720 0.088 0.139 0.199 1440 0.049 0.079 0.109 Data 0.85 5.75 Acres 22.54 Minutes 0.902 in/hr	2700	45	0.601	1.045	1.78	2700
120 0.325 0.55 0.845 180 0.245 0.41 0.599 360 0.146 0.231 0.317 720 0.088 0.139 0.19 1440 0.049 0.079 0.109 Data 0.85 2.54 Minutes 22.54 Minutes 0.902 in/hr	3600	09	0.509	0.874	1.424	3600
180 0.245 0.41 0.599 360 0.146 0.231 0.317 720 0.088 0.139 0.19 1440 0.049 0.079 0.109 1440 0.049 0.079 0.109 15.75 Acres 22.54 Minutes 0.902 in/hr	7200	120	0.325	0.55	0.845	7200
360 0.146 0.231 0.317 720 0.088 0.139 0.19 1440 0.049 0.079 0.109 Data 0.85 5.75 Acres 22.54 Minutes 0.902 in/hr	10800	180	0.245	0.41	0.599	10800
720 0.088 0.139 0.19 1440 0.049 0.079 0.109 Data 0.85 5.75 Acres 22.54 Minutes 0.902 in/hr	21600	360	0.146	0.231	0.317	21600
Data 0.85 5.75 Acres 2608 Feet 22.54 Minutes 0.902 in/hr 1.575 in/hr 2.531 in/hr 0 cfs 4.41 cfs 7.70 cfs 0.079 0.019 0.019 0.029 0	43200	720	0.088	0.139	0.19	43200
0.85 5.75 Acres 2608 Feet 22.54 Minutes 0.902 in/hr 1.575 in/hr 2.531 in/hr 0 cfs 4.41 cfs 7.70 cfs 7.70 cfs 6.85 7.70 cfs 12.38 cfs	86400	1440	0.049	0.079	0.109	86400
0.85 5.75 Acres 2608 Feet 22.54 Minutes 0.902 in/hr 1.575 in/hr 2.531 in/hr 0 cfs 4.41 cfs 7.70 cfs 7.70 cfs 6.72 Acres See Graphs 1 = 2.54.019 t -0.6623 1 = 24.019 t -0.7223	Bational Method F	Jata				Dational Ma
5.75 Acres 2608 Feet 22.54 Minutes 0.902 in/hr 1.575 in/hr 2.531 in/hr 0 cfs 4.41 cfs 7.70 cfs 7.70 cfs 12.38 cfs	"C" coeff.			J. J	Granhe	#GO "C"
2608 Feet 22.54 Minutes $i = 7.0973 t^{-0.6623}$ 1 1.575 in/hr $i = 13.346 t^{-0.686}$ 1 2.531 in/hr $i = 24.019 t^{-0.7223}$ 0 cfs 4.41 cfs 7.70 cfs $0 = 2.4.019 t^{-0.7223}$ 1 $0 = 2.531 t^{-0.$	Area of Infl.	5.75	Acres		<u> </u>	Area of Infl
22.54 Minutes 0.902 in/hr 1.575 in/hr 2.531 in/hr 0 cfs 4.41 cfs 7.70 cfs 7.70 cfs 12.38 cfs	Length (ft)	2608 F	-eet			Length (ft)
0.902 in/hr $i = 7.0973 t^{-0.6623}$ 1 1.575 in/hr $i = 13.346 t^{-0.686}$ 1 2.531 in/hr $i = 24.019 t^{-0.7223}$ 1 0 cfs 4.41 cfs 7.70 cfs 7.70 cfs 12.38 cfs	Time of Conc.	22.54 N	dinutes		•	Time of Cond
1.575 in/hr $i = 13.346 t^{-0.686}$ 1.575 in/hr $i = 24.019 t^{-0.7223}$ 10 of $i = 24.019 t^{-0.7223}$ 14.41 of $i = 24.019 t^{-0.7223}$ 17.70 of $i = 24.019 t^{-0.7223}$ 17.38 of $i = 13.38$ of $i =$	Intensity 2yr	0.902 ii	n/hr	i = 7.0973	t -0.6623	Intensity 2yr
2.531 in/hr $i = 24.019 t^{-0.7223}$ 0 cfs 4.41 cfs $7.70 cfs$ $Q=C^*l^*A$ 12.38 cfs	Intensity 10yr	1.575 ii	/hr	i = 13.346	£-0.686	Intensity 10y
0 ofs 4.41 cfs 7.70 cfs Q=C*I*A 12.38 cfs	Intensity 100 yr	2.531 jr	/hr	i = 24.019	t -0.7223	Intensity 100
4.41 cfs 7.70 cfs Q≕C*l*A 12.38 cfs	Add point flow	0	ifs			Add point flov
7.70 cfs Q=C*I*A 12.38 cfs	Peak Flow 2 yr	4.41 c	ıfs			Peak Flow 2
12.38 cfs	Peak Flow 10 yr	7.70 c	:fs	Q=C*I*A		Peak Flow 1
	Peak Flow 100 yr	12.38 c	ifs		7-	Peak Flow 1

	-	11400 South from East	th from	East	
	Intensity Duration Information	Information			
	(South Jordan Master Plan, May 2002)	ər Plan, May	/ 2002)		
		£	€	(€
	Seconds	Minutes	2 year	10 year	100 year
			In/hr	ln/hr	in/hr
	300	2	1.992	3.504	5.256
	006	15	1.192	2.144	3.556
	1800	30	0.812	1.422	2.436
	2700	45	0.601	1.045	1.78
	3600	09	0.509	0.874	1.424
	7200	120	0.325	0.55	0.845
	10800	180	0.245	0.41	0.599
_	21600	360	0.146	0.231	0.317
	43200	720	0.088	0.139	0.19
	86400	1440	0.049	0.079	0.109
	Rational Method Data	ıta			
	"C" coeff.	0.85		See	e Graphs
	Area of Infl.	5.75 Acres	Acres		•
	Length (ft)	2608 Feet	-eet		
	Time of Conc.	22.54	Minutes		*
	Intensity 2yr	0.902 in/hr	n/hr	i = 7.0973	7.0973 t ^{-0.6623}
	Intensity 10yr	1.575 in/hr	n/hr	$i = 13.346 t^{-0.686}$	989-0-1
	Intensity 100 yr	2.531 in/hr	n/hr	i = 24.019	24.019 t ^{-0.7223}
	Add point flow	0	cfs		
	Peak Flow 2 yr	4.41	cfs		
	Peak Flow 10 yr	7.70	cfs	Q=C*I*A	
	Peak Flow 100 yr	12.38	cfs		

10yr	15.41
2yr	8.82
FLOW (cfs)	JR2 = East and West

Bangerte	Bangerter to South Jordan Canal (West)	Jordan C	Sanal (Wes	₽	Willow Creek Crossing to Jordan River (East)	k Crossing	to Jorda	ın River (E	ast)	South Jordan Canal to Jordan River (Direct Discharge)	inal to Jorda	in River	(Direct Di	scharge)
Intensity Duration Information	Information	_			Intensity Duration Information	Information				Intensity Duration Information	Information			
(South Jordan Master Plan, May 2002)	er Plan, May	, 2002)			(South Jordan Master Plan, May 2002)	er Plan, May	2002)			(South Jordan Master Plan, May 2002)	er Plan, May 2	2002)		
	€	(E)	€	€		ε	€	€	e		€	€	€	€
Seconds	Minutes	2 year	10 year	100 year	Seconds	Minutes	2 year	10 year	100 year	Seconds	es	2 year	10 year	100 year
		In/hr	ln/hr	ir/hr			ln/hr	ln/hr	in/hr	-		In/hr	In/hr	in/hr
300	5	1.992	3.504	5.256	300	2	1.992	3.504	5.256	300	τυ ,	1.992	3.504	5.256
006	15	1.192	2.144	3.556	006	15	1.192	2.144	3.556	006		1.192	2.144	3.556
1800	30	0.812	1.422	2.436	1800	30	0.812	1.422	2.436	1800	30	0.812	1.422	2.436
2700	45	0.601	1.045	1.78	2700	45	0.601	1.045	1.78	2700		0.601	1.045	1.78
3600	09	0.509	0.874	1.424	3600	09	0.509	0.874	1.424	3600		0.509	0.874	1.424
7200	120	0.325	0.55	0.845	7200	120	0.325	0.55	0.845	7200	120	0.325	0.55	0.845
10800	180	0.245	0.41	0.599	10800	180	0.245	0.41	0.599	10800	180	0.245	0.41	0.599
21600	360	0.146	0.231	0.317	21600	360	0.146	0.231	0.317	21600	360	0.146	0.231	0.317
43200	720	0.088	0.139	0.19	43200	720	0.088	0.139	0.19	43200	720 (0.088	0.139	0.19
86400	1440	0.049	0.079	0.109	86400	1440	0.049	0.079	0.109	86400	1440 (0.049	0.079	0.109
Rational Method Data	ata				Rational Method Data	ata				Rational Method Data	ata			
"C" coeff.	0.85		Set	See Graphs	"C" coeff.	0.85		See	See Graphs	"C" coeff.	0.85		See	See Graphs
Area of Infl.	25.96 Acres	cres			Area of Infl.	8.88 Acres	cres			Area of Infl.	5.60 Acres	res		-
Length (ft)	13500 Feet	eet			Length (ft)	5100 Feet	eet			Length (ft)	4000 Feet	er er		
Time of Conc.	77 N	77 Minutes	•		Time of Conc.	35 Mi	35 Minutes			Time of Conc.	29.5 Minutes	nutes		
Intensity 2yr	0.400 in/hr	٧hr	$i = 7.0973 t^{-0.6623}$	1 4 -0.6623	Intensity 2yr	0.674 in/hr	/hr	$i = 7.0973 t^{-0.6623}$	t -0.6623	Intensity 2yr	0.754 in/hr	•	i = 7.0973 t -0.6623	t -0.6623
Intensity 10yr	0.678 in/hr	νhr	$i = 13.346 t^{-0.686}$	1 -0.686	Intensity 10yr	1.164 in/hr		$i = 13.346 t^{-0.686}$	t -0.686	Intensity 10yr	1.309 in/hr		$= 13.346 t^{-0.686}$	1-0.686
Intensity 100 yr	1.042 in/hr	√hr	i = 24.019 t ^{-0.7223}	t -0.7223	Intensity 100 yr	1.842 in/hr		$i = 24.019 t^{-0.7223}$	t -0.7223	Intensity 100 yr	2.084 in/hr		$i = 24.019 t^{-0.7223}$	t -0.7223
Add point flow	0 ofs	Į2			Add point flow	0 cfs				Add point flow	0 cfs			
Peak Flow 2 yr	8.82 cfs	fs.		٠	Peak Flow 2 yr	5.09 cfs				Peak Flow 2 yr	3.59 cfs			
Peak Flow 10 yr	14.96 cfs	fs fs	Q=C*I*A		Peak Flow 10 yr	8.79 cfs 13 91 cfs		0=C*I*A		Peak Flow 10 yr	6.23 cfs		Q=C*I*A	
1 22		2			l car i car i vica	2 6.5				rear i low loo y	3,32, 013			

Rational Method Data	ta	
"C" coeff.	0.85	See Graphs
Area of Infl.	5.60 Acres	
Length (ft)	4000 Feet	
Time of Conc.	29.5 Minutes	*
Intensity 2yr	0.754 in/hr	$i = 7.0973 t^{-0.6623}$
Intensity 10yr	1.309 in/hr	$i = 13.346 t^{-0.686}$
Intensity 100 yr	2.084 in/hr	$i = 24.019 t^{-0.7223}$
Add point flow	0 cfs	
Peak Flow 2 yr	3.59 cfs	
Peak Flow 10 yr	6.23 cfs	Q=C*1*A
Peak Flow 100 yr	9.92 cfs	

Intensity Duration Information Intensity Duration Intensity Durati		11400 South (MCT)	uth (MC	(F.		-
(i) (i) (i) (i) Minutes 2 year 10 year 100 year 100 year 100 hinter in/hr in/	Intensity Duration	n Information				Intensity Dura
(i) (i) (i) (i) (i) (i) (i) (i) (i) Minutes 2 year 10 year 100 yea	(South Jordan Mas	ster Plan, May	2002)			(South Jordan
Minutes 2 year 10 year 100 year 11,992 3.504 5.256 3.504 5.256 3.504 5.256 3.504 5.256 3.504 5.256 3.504 5.256 3.506 0.812 1.422 2.436 0.601 1.045 1.78 0.601 1.045 1.78 0.601 1.045 1.78 0.845 1.80 0.245 0.41 0.599 3.60 0.146 0.231 0.317 720 0.088 0.139 0.19 1.440 0.049 0.079 0.109 0.19 1.0.76 Acres 7950 Feet 49.25 Minutes 7950 Feet 49.25 Minutes 0.537 in/hr i = 13.346 t ^{-0.686} 1.439 in/hr i = 24.019 t ^{-0.7223} 0.645 1.439 in/hr i = 24.019 t ^{-0.7223} 0.645 4.91 cfs 8.42 cfs Q=C*!*A		€	€	€	(2)	
In/hr In/h	Seconds	Minutes	2 year	10 year	100 year	Seconds
5 1.992 3.504 5.256 1.192 2.144 3.556 30 0.812 1.422 2.436 45 0.601 1.045 1.78 60 0.509 0.874 1.424 120 0.325 0.55 0.845 180 0.245 0.41 0.599 360 0.146 0.231 0.19 1440 0.049 0.079 0.109 10.76 Acres 7950 Feet 49.25 Minutes 0.537 in/hr			In/hr	ln/hr	in/hr	
15 1.192 2.144 3.556 30 0.812 1.422 2.436 45 0.601 1.045 1.78 60 0.509 0.874 1.424 120 0.325 0.55 0.845 180 0.245 0.41 0.599 360 0.146 0.231 0.317 720 0.088 0.139 0.19 1440 0.049 0.079 0.109 10.76 Acres 7950 Feet 49.25 Minutes 0.537 in/hr	300	S	1.992	3.504	5.256	300
30 0.812 1.422 2.436 45 0.601 1.045 1.78 60 0.509 0.874 1.424 120 0.325 0.55 0.845 180 0.245 0.41 0.599 360 0.146 0.231 0.317 720 0.088 0.139 0.19 1440 0.049 0.079 0.109 10.76 Acres 7950 Feet 49.25 Minutes 0.537 in/hr	006	15	1.192	2.144	3.556	006
45 0.601 1.045 1.78 60 0.509 0.874 1.424 120 0.325 0.55 0.845 180 0.245 0.41 0.599 360 0.146 0.231 0.317 720 0.088 0.139 0.19 1440 0.049 0.079 0.109 10.76 Acres 7950 Feet 49.25 Minutes 0.537 in/hr	1800	30	0.812	1.422	2.436	1800
60 0.509 0.874 1.424 120 0.325 0.55 0.845 180 0.245 0.41 0.599 360 0.146 0.231 0.317 720 0.088 0.139 0.19 1440 0.049 0.079 0.109 10.76 Acres 7950 Feet 49.25 Minutes 0.537 in/hr	2700	45	0.601	1.045	1.78	2700
120 0.325 0.55 0.845 180 0.245 0.41 0.599 360 0.146 0.231 0.317 720 0.088 0.139 0.19 1440 0.049 0.079 0.109 10.76 Acres 7950 Feet 49.25 Minutes 0.537 in/hr	3600	09	0.509	0.874	1.424	3600
180 0.245 0.41 0.599 360 0.146 0.231 0.317 720 0.088 0.139 0.19 1440 0.049 0.079 0.109 10.76 Acres 7950 Feet 49.25 Minutes 0.537 in/hr	7200	120	0.325	0.55	0.845	7200
360 0.146 0.231 0.317 720 0.088 0.139 0.19 1440 0.049 0.079 0.109 Data 0.85 10.76 Acres 7950 Feet 49.25 Minutes 0.537 in/hr	10800	180	0.245	0.41	0.599	10800
720 0.088 0.139 0.19. 1440 0.049 0.079 0.109 Data 0.85 10.76 Acres 7950 Feet 49.25 Minutes 0.537 in/hr	21600	360	0.146	0.231	0.317	21600
Data 0.85 10.76 Acres 7950 Feet 49.25 Minutes 0.537 in/hr	43200	720	0.088	0.139	0.19	43200
0.85 10.76 Acres 7950 Feet 49.25 Minutes 0.537 in/hr i = 7.0973 t ^{-0.6623} 0.921 in/hr i = 13.346 t ^{-0.7223} 0 cfs 4.91 cfs 8.42 cfs 0 GC×!*A	86400	1440	0.049	0.079	0.109	86400
0.85 10.76 Acres 10.76 Acres 7950 Feet 49.25 Minutes 0.537 in/hr						
0.85 10.76 Acres 7950 Feet 49.25 Minutes 0.537 in/hr 0.921 in/hr 1.439 in/hr 0 cfs 4.91 cfs 8.42 cfs 0.85 0.85 0.85 0.85 4.91 cfs 13.16 cfs	Rational Method L	Jata				Rational Meth
10.76 Acres 7950 Feet 49.25 Minutes 0.537 in/hr 1.439 in/hr 1.541 in/hr 1.541 in/hr 1.543 in/hr 1.544 in/hr 1.544 in/hr 1.545 in/hr 1.555	"C" coeff.	0.85		Se	e Graphs	"C" coeff.
7950 Feet 49.25 Minutes 0.537 in/hr	Area of Infl.	10.76 A	cres		•	Area of Infl.
49.25 Minutes 0.537 in/hr 0.921 in/hr 1.439 in/hr 0 cfs 4.91 cfs 8.42 cfs 0.537 in/hr 1 = 7.0973 t ^{-0.6623} 1 = 7.0973 t ^{-0.6623} 1 = 24.019 t ^{-0.7223} 0 cfs 4.91 cfs 8.42 cfs 13.16 cfs	Length (ft)	7950 F	eet			Length (ft)
0.537 in/hr i = 7.0973 $t^{-0.6623}$ 0.921 in/hr i = 13.346 $t^{-0.686}$ 1.439 in/hr i = 24.019 $t^{-0.7223}$ 0 cfs 4.91 cfs 8.42 cfs Q=C* *A 13.16 cfs	Time of Conc.	49.25 M	inutes		•	Time of Conc.
0.921 in/hr i = 13.346 t ^{-0.686} 1.439 in/hr i = 24.019 t ^{-0.7223} 0 cfs 4.91 cfs 8.42 cfs 0=C* *A 13.16 cfs	Intensity 2yr	0.537 in	/hr	i = 7.0973	t -0.6623	Intensity 2yr
1.439 in/hr $i = 24.019 t^{-0.7223}$ 0 cfs 4.91 cfs $A.91 cfs$ $A.92 cfs$ $A.92 cfs$ $A.93.16 cfs$	Intensity 10yr	0.921 in	/hr	i = 13.346	989.0-1	Intensity 10yr
0 cfs 4.91 cfs 8.42 cfs Q=C* *A 13.16 cfs	Intensity 100 yr	1.439 in	/hr	i = 24.019	t -0.7223	Intensity 100 yr
4.91 cfs 8.42 cfs Q=C* *A 13.16 cfs	Add point flow	000	S			Add point flow
8.42 cfs	Peak Flow 2 yr	4.91 cf	Ņ			Peak Flow 2 yr
13.16 cfs	Peak Flow 10 yr	8.42 cf	·ν	Q=C*I*A		Peak Flow 10 y
	Peak Flow 100 yr	13.16 cf	ω			Peak Flow 100

ster Plan, May 2002) (t) (t) (i) (j) (j) (k) (k) (j) (k) (k) (j) (k) (k) (k) (k) (k) (k) (k) (k) (k) (k		11400	11400 South (MC Direct Discharge)	Direct	Discharge)	
tster Plan, May 2002) (t) (t) (j) (ii) Minutes 2 year 10 yee In/hr In/hr 5 1.992 3.504 15 1.192 2.144 30 0.812 1.422 45 0.601 1.045 60 0.509 0.874 120 0.325 0.55 180 0.245 0.41 360 0.146 0.231 720 0.088 0.139 1440 0.049 0.079 1.350 in/hr i = 13.3 2.393 in/hr i = 13.3 0 cfs 1.71 cfs 3.03 cfs 0 0 CC*!rA		Intensity Duration	Informatior	,		
(t) (i) (j) Minutes 2 year 10 year In/hr In/hr In/hr 5 1.992 3.504 15 1.192 2.144 30 0.812 1.422 45 0.601 1.045 60 0.509 0.874 120 0.325 0.55 180 0.245 0.41 360 0.146 0.231 720 0.088 0.139 1440 0.049 0.079 1.350 in/hr i = 7.09 2.393 in/hr i = 24.0 0 cfs 1.71 cfs 3.03 cfs 0 CC*!*A		(South Jordan Mast	ter Plan, May	/ 2002)		
Minutes 2 year 10 yee In/hr In/hr 5 1.992 3.504 15 1.192 2.144 30 0.812 1.422 45 0.601 1.045 60 0.509 0.874 120 0.325 0.55 180 0.146 0.231 720 0.088 0.139 1440 0.049 0.079 1.350 in/hr i = 7.09 2.393 in/hr i = 24.0 0 cfs 1.71 cfs 3.03 cfs 0 a C~!rA			Đ	Ξ	((
In/hr In/h		Seconds	Minutes	2 year	10 year	100 year
5 1.992 3.504 15 1.192 2.144 30 0.812 1.422 45 0.601 1.045 60 0.509 0.874 120 0.325 0.655 180 0.245 0.41 360 0.146 0.231 720 0.088 0.139 1440 0.049 0.079 1.350 in/hr i = 7.09 2.393 in/hr i = 24.0 0 cfs 1.71 cfs 3.03 cfs 0 a C < 174 4 4 7 cfs				ln/hr	ln/hr	in/hr
15 1.192 2.144 30 0.812 1.422 45 0.601 1.045 60 0.509 0.874 120 0.325 0.55 180 0.245 0.41 360 0.146 0.231 720 0.088 0.139 1440 0.049 0.079 1.49 Acres 550 Feet 12.25 Minutes 1.350 in/hr i = 7.09 2.393 in/hr i = 13.3 3.932 in/hr i = 24.0 0 cfs 1.71 cfs 3.03 cfs 4.97 cfs		300	5	1.992	3.504	5.256
30 0.812 1.422 45 0.601 1.045 60 0.509 0.874 120 0.325 0.55 180 0.245 0.41 360 0.146 0.231 720 0.088 0.139 1440 0.049 0.079 1.350 Feet 12.25 Minutes 1.350 in/hr i = 7.09 2.393 in/hr i = 24.0 0 cfs 1.71 cfs 3.03 cfs 0.6074		006	15	1.192	2.144	3.556
45 0.601 1.045 60 0.509 0.874 120 0.325 0.55 180 0.245 0.41 360 0.146 0.231 720 0.088 0.139 1440 0.049 0.079 1.49 Acres 550 Feet 12.25 Minutes 1.350 in/hr i = 7.09 2.393 in/hr i = 24.0 0 cfs 1.71 cfs 3.03 cfs 4.97 cfs		1800	30	0.812	1.422	2.436
60 0.509 0.874 120 0.325 0.55 180 0.245 0.41 360 0.146 0.231 720 0.088 0.139 1440 0.049 0.079 1.49 Acres 550 Feet 12.25 Minutes 1.350 in/hr i = 7.09 2.393 in/hr i = 24.0 0 cfs 1.71 cfs 3.03 cfs 4.97 cfs		2700	45	0.601	1.045	1.78
120 0.325 0.55 180 0.245 0.41 360 0.146 0.231 720 0.088 0.139 1440 0.049 0.079 Data 0.85 1.49 Acres 550 Feet 12.25 Minutes 1.350 in/hr i = 7.09 2.393 in/hr i = 24.0 0 cfs 1.71 cfs 3.03 cfs 4.97 cfs		3600	09	0.509	0.874	1.424
180 0.245 0.41 360 0.146 0.231 720 0.088 0.139 1440 0.049 0.079 0.85 1.49 Acres 550 Feet 12.25 Minutes 1.350 in/hr i = 7.09 2.393 in/hr i = 24.0 0 cfs 1.71 cfs 3.03 cfs		7200	120	0.325	0.55	0.845
360 0.146 0.231 720 0.088 0.139 1440 0.049 0.079 0.85 1.49 Acres 550 Feet 12.25 Minutes 1.350 in/hr i = 7.09 2.393 in/hr i = 13.3 3.932 in/hr i = 24.0 0 cfs 1.71 cfs 3.03 cfs 4.97 cfs		10800	180	0.245	0.41	0.599
720 0.088 0.139 1440 0.049 0.079 Data 0.85 1.49 Acres 550 Feet 12.25 Minutes 1.350 in/hr i = 7.09 2.393 in/hr i = 13.3 3.932 in/hr i = 24.0 0 cfs 1.71 cfs 3.03 cfs 4.97 cfs		21600	360	0.146	0.231	0.317
Data 0.85 1.49 Acres 550 Feet 12.25 Minutes 1.350 in/hr 2.393 in/hr 0 cfs 1.71 cfs 3.03 cfs 4 97 cfs		43200	720	0.088	0.139	0.19
0.85 1.49 Acres 550 Feet 12.25 Minutes 1.350 in/hr 2.393 in/hr 0 cfs 1.71 cfs 3.03 cfs 4.97 cfs		86400	1440	0.049	0.079	0.109
0.85 1.49 Acres 550 Feet 12.25 Minutes 1.350 in/hr i = 7.09 2.393 in/hr i = 13.3 3.932 in/hr i = 24.0 0 cfs 1.71 cfs 3.03 cfs 4.97 cfs		Rational Method D	ata			
1.49 Acres 550 Feet 12.25 Minutes 1.350 in/hr 2.393 in/hr 0 cfs 1.71 cfs 3.03 cfs 4.97 cfs					Sec	See Graphs
550 Feet 12.25 Minutes 1.350 in/hr i = 2.393 in/hr i = 0 cfs 1.71 cfs 3.03 cfs 0 CC		Area of Infl.		Acres		
12.25 Minutes 1.350 in/hr 2.393 in/hr 3.932 in/hr 0 cfs 1.71 cfs 3.03 cfs 4.97 cfs		Length (ft)	550 F	-eet		
1.350 in/hr i = 2.393 in/hr i = 3.932 in/hr i = 0 ofs 1.71 ofs 3.03 ofs Q=C	<u> </u>	Time of Conc.	12.25	Minutes		*
2.393 in/hr i = 0 cfs 1.71 cfs 3.03 cfs Q=(4.97 cfs 4.97 cfs 4.97 cfs 1.393 cfs Q=(4.97 cfs 4.97 cfs 4.97 cfs 1.393 cfs 1.393 cfs Q=(4.97 cfs 4.97 cfs 1.393		Intensity 2yr	1,350 i	n/hr		t -0.6623
3.932 in/hr i = 0 cfs 1.71 cfs 3.03 cfs Q=C		Intensity 10yr	2.393 ii	n/hr	i = 13.346	1-0.686
0 ofs 1.71 ofs 3.03 ofs 4 97 ofs		Intensity 100 yr	3.932 ii	n/hr		t -0.7223
1.71 cfs 3.03 cfs 4 97 cfs		Add point flow	0	şt.		
3.03 cfs 4 97 cfs	<u> </u>	Peak Flow 2 yr	1.71 0	ifs		
4 97	_	eak Flow 10 yr	3.03 0	ifs	Q=C*I*A	
	_	Peak Flow 100 yr	4.97 c	fs		

1 EO 11 (CIS)	4ر	- A
MCT	4.91	8.42
MC Direct Discharge	1.71	3.03

		Street			
intensity Duration					
(South Jordan Mas	ler Plan, Ma	y 2002)			
	(†)	(i)	(i)	(i)	
Seconds	Minutes	2 year	10 year	100 year	
		ln/hr	In/hr	in/hr	
300	5	1.992	3.504	5.256	
900	15	1.192	2.144	3.556	
300	30	0.812	1.422	2.436	
700	45	0.601	1.045	1.78	
3600	60	0.509	0.874	1.424	
7200	120	0.325	0.55	0.845	
10800	180	0.245	0.41	0.599	
21600	360	0.146	0.231	0.317	
43200	720	0.088	0.139	0.19	
86400	1440	0.049	0.079	0.109	
Rational Method L	Data				
"C" coeff.	0.85		See Graphs		
Area of Infl.	5.91	Acres	1		
Length (ft)	6800	Feet	1		
Time of Conc.	43.5	Minutes		*	
Intensity 2yr	0.583	in/h r	i = 7.097	3 t ^{-0.6623}	
Intensity 10yr	1.003	in/hr	i = 13.34		
Intensity 100 yr	1.574	in/hr	i = 24.01	9 t ^{-0.7223}	
Add point flow	0	cfs			
Peak Flow 2 yr	2.93	cfs			
Peak Flow 10 yr	5.04	cfs	Q=C*l*A		
Peak Flow 100 yr	7.91	cfs			

Intensity Duration	11800 Sou		oass	<u> </u>	
(South Jordan Mas					
	(t)	(i)	(i)	(i)	
Seconds	Minutes	2 year	10 year	100 yea	
		In/hr	In/hr	in/hr	
300	5	1.992	3.504	5,256	
900	15	1.192	2,144	3.556	
1800	30	0.812	1,422	2.436	
2700	45	0.601	1.045	1.78	
3600	60	0.509	0.874	1.424	
7200	120	0.325	0.55	0.845	
10800	180	0.245	0.41	0.599	
21600	360	0.146	0.231	0.317	
43200	720	0.088	0.139	0.19	
16400	1440	0.049	0.079	0.109	
al Method E	ata		**		
*C coeff. 0.85 See Grap					
Area of Infl.	2.49	Acres	1		
Length (ft)	6,348.00	Feet	\		
Time of Conc.	41.24	Minutes		4	
Intensity 2yr	0.604 i	in/hr	i = 7.0973 t ^{-0.662}		
Intensity 10yr	1.041 i	n/hr	$i = 13.346 t^{-0.686}$		
Intensity 100 yr	1.636 i	n/hr	i = 24.01	9 t ^{-0.7223}	
Add point flow	0 (cfs			
Peak Flow 2 yr	1.28	cfs			
Peak Flow 10 yr	2.21		Q=C*I*A		
Peak Flow 100 yr	3.47	cfs			

J15	Interchang	e and H	lighway	43 1	
Intensity Duration					
(South Jordan Mas	ter Plan, May	(2002)			
	(t)	(i)	(i)	(i)	
Seconds	Minutes	2 year	10 year	100 year	
		In/hr	ln/hr	in/hr	
300	5	1.992	3.504	5.256	
900	15	1.192	2.144	3.556	
1800	30	0.812	1.422	2.436	
2700	45	0.601	1.045	1.78	
3600	60	0.509	0.874	1.424	
7200	120	0.325	0.55	0.845	
10800	180	0.245	0.41	0.599	
21600	360	0.146	0.231	0.317	
43200	720	0.088	0.139	0.19	
86400	1440	0.049	0.079	0.109	
Rational Method I	Data				
"C" coeff.	0.85		Se	e Graphs	
Area of Infl.	5.58	Acres	\		
Length (ft)	5100	Feet	\		
Time of Conc.	35	Minutes	-	1	
¹ 'ty 2уг	0.674	in/hr	i = 7.097	3 t ^{-0.6623}	
у 10yr	1.164	in/hr	i = 13.34	6 t ^{-0.686}	
y 100 yr	1.842	in/hr	i = 24.01	9 t ^{-0.7223}	
Acu point flow	0	cts			
Peak Flow 2 yr	3.19	cfs			
Peak Flow 10 yr	5.52	cfs	Q=C*I*A		
Peak Flow 100 yr	8.73	cfs			

		Gatewa	у	
Intensity Duration				
(South Jordan Mast	er Plan, May	(2002)		
	(t)	(i)	(i)	(i)
Seconds	Minutes	2 year	10 year	100 year
		In/hr	In/hr	in/hr
300	5	1.992	3,504	5.256
900	15	1.192	2.144	3,556
1800	30	0.812	1,422	2.436
2700	45	0.601	1.045	1.78
3600	60	0.509	0.874	1.424
7200	120	0.325	0.55	0.845
10800	180	0.245	0.41	0.599
21600	360	0.146	0.231	0.317
43200	720	0.088	0.139	0.19
86400	1440	0.049	0.079	0.109
Rational Method D	ata			
"C" coeff.	0.85		Se	e Graphs
Area of Infl.	2.86	Acres		\
Length (ft)	2,673.00	Feet		1
Time of Conc.	22.865	Minutes		¥
Intensity 2yr	0.893	in/hr	i = 7.097	3 t ^{-0.6623}
Intensity 10yr	1.559	in/hr	i = 13.34	
Intensity 100 yr	2.505	in/hr	i = 24.01	9 t ^{-0.7223}
Add point flow	0	cfs		
Peak Flow 2 yr	2.17	cfs		
Peak Flow 10 yr	3.78	cfs	Q=C*I*A	
Peak Flow 100 yr	6.08	cfs		

	1000 Sout		pass	
Intensity Duration				
(South Jordan Mast				
	(t)	(i)	(i)	(i)
Seconds	Minutes	2 year	10 year	100 yea
		ln/hr	ln/hr	in/hr
300	5	1.992	3.504	5.256
900	15	1.192	2.144	3.556
1800	30	0.812	1.422	2.436
2700	45	0.601	1.045	1.78
3600	60	0.509	0.874	1.424
7200	120	0.325	0,55	0.845
10800	180	0.245	0.41	0.599
21600	360	0.146	0.231	0.317
43200	720	0.088	0.139	0.19
86400	1440	0.049	0.079	0.109
Rational Method D	ata			
"C" coeff.	0.85		Se	e Graphs
Area of Infl.	2.79 Acres			\
Length (ft)	7,241.00	Feet		1
Time of Conc.	45.705	Minutes		+
Intensity 2yr	0.565 in/hr		i = 7.0973 t ^{-0.6623}	
Intensity 10yr	0.970	in/hr	i = 13.34	6 t ^{-0,686}
Intensity 100 yr	1.519 i	in/hr	i = 24.01	9 t ^{-0.7223}
Add point flow	0	cfs		
Peak Flow 2 yr	1.34	cfs		
Peak Flow 10 yr	2.30	cis	Q=C*I*A	
Peak Flow 100 yr	3.60	cfs		

	Lone Peak Parkway						
Intensity Duration							
(South Jordan Mast	er Plan, Ma	y 2002)					
	(t)	(i)	(i)	(i)			
Seconds	Minutes	2 year	10 year	100 year			
		ln/hr	ln/hr	in/hr			
300	_						
900	5	1.992	3.504	5.256			
	15	1.192	2.144	3.556			
1800	30	0.812	1.422	2.436			
2700	45	0.601	1.045	1.78			
3600	60	0.509	0.874	1.424			
7200	120	0.325	0.55	0.845			
10800	180	0.245	0.41	0.599			
21600	360	0.146	0.231	0.317			
43200	720	0.088	0.139	0.19			
86400	1440	0.049	0.079	0,109			
Rational Method D							
C* coeff.	0.85		See Graphs				
Area of Infl.		Acres	\				
_ength (ft)	2,626.00		\ 1				
Time of Conc.	22.63	Minutes					
ntensity 2yr	0.899	in/hr	$i = 7.0973 t^{-0.6623}$				
ntensity 10yr	1.570	in/hr	i = 13.34				
ntensity 100 yr	2.524	in/hr	i = 24.01	9 t ^{-0.7223}			
Add point flow	0	cfs					
Peak Flow 2 yr	3.53	cfs		- 1			
Peak Flow 10 yr	6.17	cfs	Q=C*I*A				
Peak Flow 100 yr	9.92	cfs					
	1140	South					
adamait. Dura N							

	1140	South				
Intensity Duration						
(South Jordan Mas	ter Plan, May	(2002)				
	(t)	(i)	(i)	(i)		
Seconds	Minutes	2 year	10 year	100 year		
		ln/hr	In/hr	in/hr		
	•					
300	5	1.992	3.504	5.256		
900	15	1.192	2.144	3.556		
1800	30	0.812	1.422	2.436		
2700	45	0.601	1.045	1.78		
3600	60	0.509	0.874	1.424		
7200	120	0.325	0.55	0.845		
10800	180	0.245	0.41	0.599		
21600	360	0.146	0.231	0.317		
43200	720	0.088	0.139	0.19		
86400	1440 0.049		0.079	0.109		
B 12 111 11 11						
Rational Method L						
C coeff.	0.85		See Graphs			
Area of Infl.	5.32 Acres		\			
Length (ft)	3254		\			
Time of Conc.	25.77	Minutes		4		
Intensity 2yr	0.825	in/hr	i = 7.097	3 t ^{-0.6623}		
Intensity 10yr	1.437	in/hr	$i = 13.346 t^{-0.686}$			
Intensity 100 yr	2.298	in/hr	i = 24.01	9 t ^{-0.7223}		
Add point flow	0	cfs				
Peak Flow 2 yr	3.73	cfs				
Peak Flow 10 yr	6.49	cfs	Q=C*l*A			
Peak Flow 100 yr	10.38	cfs				

	2yr	10yr
WC1a = 110, 118, 114, State	9.28	16.04
WCDEND alica grain Galavely Populacia		776
Works 16 biller hange plant - seem to see the		3.700
WC 16 7 White characteristic which was track and the second		1.41

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(i) 100 year in/hr

12300 South
Intensity Duration Information
(South Jordan Master Plan, May 2002)
(1)
(1)
(1)
Seconds Minutes 2 year

5.256 3.556 2.436 1.78 1.424 0.845 0.599 0.317 0.19

3.504 2.144 1.422 1.045 0.874 0.55 0.41 0.231 0.139

1.992 0.812 0.601 0.509 0.325 0.245 0.048 0.049

5 15 30 45 60 120 180 360 720 1440

300 900 1800 2700 3600 7200 10800 21600 43200 86400

	State	State Street				Lone Peak Parkway	ık Parkw	ay	
Intensity Duration Information	Information	_			Intensity Duration Information	Information	ے		
(South Jordan Master Plan, May 2002)	ter Plan, May	/ 2002)			(South Jordan Master Plan, May 2002)	ter Plan, May	y 2002)		
	Đ	€	€	€		€	· •	€	€
Seconds	Minutes	2 year	10 year	100 year	Seconds	Minutes	2 year	10 year	100 year
		In/hr	In/hr	in/hr			lr/hr	ln/hr	in/hr
300	5	1.992	3.504	5.256	300	2	1.992	3.504	5.256
006	15	1.192	2.144	3.556	006	15	1.192	2.144	3,556
1800	30	0.812	1.422	2.436	1800	30	0.812	1.422	2.436
2700	45	0.601	1.045	1.78	2700	45	0.601	1.045	1.78
3600	09	0.509	0.874	1.424	3600	09	0.509	0.874	1.424
7200	120	0.325	0.55	0,845	7200	120	0.325	0.55	0.845
10800	180	0.245	0.41	0.599	10800	180	0.245	0.41	0.599
21600	360	0.146	0.231	0.317	21600	360	0.146	0.231	0.317
43200	720	0.088	0.139	0.19	43200	720	0.088	0.139	0.19
86400	1440	0.049	0.079	0.109	86400	1440	0.049	0.079	0.109
Rational Method Data	Jata				Rational Method Data	ata			
"C" coeff.	0.85		Se	See Graphs	"C" coeff.	0.85		Se	See Graphs
Area of Infl.	7.22 Acres	Acres			Area of Infl.	6.40 Acres	Acres		
Length (ft)	7453 Feet	eet			Length (ft)	5754 Feet	-eet		
Time of Conc.	46.765 Minutes	Ainutes		-	Time of Conc.	38.27 1	38.27 Minutes		
Intensity 2yr	0,556 in/hr	√hr	$i = 7.0973 t^{-0.6623}$	3 t -0.6623	Intensity 2yr	0.635 in/hr	n/hr	$i = 7.0973 t^{-0.6623}$	1 -0.6623
Intensity 10yr	0.955 in/hr	√h r	$i = 13.346 t^{-0.686}$	3 t -0.686	Intensity 10yr	1,095 in/hr	n/hr	$i = 13.346 t^{-0.686}$	-0.686
Intensity 100 yr	1.494 in/hr	\hr	$i = 24.019 t^{-0.7223}$	9 t -0.7223	Intensity 100 yr	1.727 in/hr	n/hr	$i = 24.019 t^{-0.7223}$	t -0.7223
Add point flow	0 cfs	fs.			Add point flow	0 cfs	Sts		
Peak Flow 2 yr	3.41 cfs	fs.			Peak Flow 2 yr	3.46 cfs	sts		
Peak Flow 10 yr	5.86 cfs	fs.	Q=C*I*A		Peak Flow 10 yr	5.96 cfs	şţ	Q=C*I*A	
Peak Flow 100 vr	9.17 cfs	ţ			Peak Flow 100 yr	9.40 cfs	şį		

	2yr	10yr
WC2a = State & 123	4,62	96'2
Direct Discharge	arge	
WC2a = 123	1.21	2.10
WC2a = LonePeak	3.46	5.96

Rational Method Data "C" coeff. Area of Infl. 1.59 Acres Length (tt) 2700 Feet Time of Conc. 23 Minutes Intensity 2yr 1.553 in/hr Intensity 10yr Add point flow Add point flow Peak Flow 2 yr Peak Flow 2 yr Peak Flow 10 yr Pock Elem 100 fest				
C" coeff. 0.85 Area of Infl. 1.59 Acres Length (ft) 2700 Feet Time of Conc. 23 Minutes Intensity 2yr 0.890 in/hr Intensity 10yr 1.553 in/hr Intensity 100 yr 2.494 in/hr Add point flow 0 cfs Peak Flow 2 yr 1.21 cfs Peak Flow 10 yr 2.10 cfs Peak Flow 2 yr 1.21 cfs		Rational Method Da	ta	
Area of Infl. 1.59 Acres Length (ft) 2700 Feet Time of Conc. 23 Minutes Intensity 2yr 0.890 in/hr Intensity 10yr 1.553 in/hr Intensity 100 yr 2.494 in/hr Add point flow 0 cfs Peak Flow 2 yr 1.21 cfs Peak Flow 2 yr 2.00 cfs	Graphs	"C" coeff.	0.85	See Graphs
Length (ft) 2700 Feet Time of Conc. 23 Minutes Intensity 2yr 0.890 in/hr Intensity 10yr 1.553 in/hr Intensity 100 yr 2.494 in/hr Add point flow 0 cfs Peak Flow 2 yr 1.21 cfs Peak Flow 2 yr 2.10 cfs Peak Flow 2 yr 2.00 cfs 2		Area of Infl.	1.59 Acres	
Time of Conc. 23 Minutes		Length (ft)	2700 Feet	
Intensity 2yr 0.890 in/hr Intensity 10yr 1.553 in/hr Add point flow 0 cfs Peak Flow 2 yr 1.21 cfs Peak Flow 2 yr 2.00 cfs Peak Flow 2 yr 2.00 cfs		Time of Conc.	23 Minutes	*
Intensity 10yr 1.553 in/hr Add point flow 0 cfs Peak Flow 2 yr 1.21 cfs Peak Flow 2 yr 2.00 cfs Peak Flow 10 yr 2.00 cfs	1 -0.6623	Intensity 2yr	0.890 in/hr	i = 7.0973 t ^{-0.6623}
Intensity 100 yr 2.494 in/hr Add point flow 0 cfs Peak Flow 2 yr 1.21 cfs Peak Flow 10 yr 2.00 cfs	1 -0.686	Intensity 10yr	1.553 in/hr	$i = 13.346 t^{-0.686}$
0 cfs 1.21 cfs 2.10 cfs	t -0.7223	Intensity 100 yr	2.494 in/hr	$i = 24.019 t^{-0.7223}$
1.21 cfs 2.10 cfs		Add point flow	0 cfs	
2.10 cfs		Peak Flow 2 yr	1.21 cfs	
		Peak Flow 10 yr	2.10 cfs	Q=C*I*A
		Peak Flow 100 yr	3.38 cfs	

(t) (South Jordan Master Plan, May 2002) (t) (t) (i) (i)	oformotion.				
(South Jordan Master	HOTHIBUION				Intensity Duration
G G G G G G G G G G G G G G G G G G G	r Plan, May	2002)			(South Jordan Mast
ילטיטיטיטי	Œ	Ξ	(=	-
Springs I	Minutes	2 year	10 year	100 year	Seconds
		ln/hr	In/hr	in/hr	
300	5	1.992	3.504	5.256	300
006	15	1.192	2.144	3.556	006
1800	30	0.812	1.422	2.436	1800
2700	45	0.601	1.045	1.78	2700
3600	09	0.509	0.874	1.424	3600
7200	120	0.325	0.55	0.845	7200
10800	180	0.245	0.41	0.599	10800
21600	360	0.146	0.231	0.317	21600
43200	720	0.088	0.139	0.19	43200
86400	1440	0.049	0.079	0.109	86400
Rational Method Data	g				Bational Method D
"C" coeff.	0.85		Se	See Graphs	"C" coeff.
Area of Infl.	19.54 Acres	cres			Area of Infl.
Length (ft)	10640 Feet	eet			Length (ft)
Time of Conc.	62.7 Minutes	linutes		•	Time of Conc.
Intensity 2yr	0.458 in/hr	/hr	i = 7.097	7.0973 t ^{-0.6623}	Intensity 2yr
Intensity 10yr	0.781 in/hr	/hr	i = 13.34	13.346 t -0.686	Intensity 10yr
Intensity 100 yr	1.209 in/hr	/hr	i = 24.019	24.019 t -0.7223	Intensity 100 yr
Add point flow	0 cfs	တ္ဟ			Add point flow
Peak Flow 2 yr	7.61 cfs	န			Peak Flow 2 yr
Peak Flow 10 yr		နှ	Q=C*I*A		Peak Flow 10 yr
Peak Flow 100 yr	20.08 CI	cfs			Peak Flow 100 yr

	South Jordan Canal (W end of Design to Redwood Rd)	ınal (W en	d of Des	sign to Red	wood Rd)
	Intensity Duration Information	Informatio	c		
	(South Jordan Master Plan, May 2002)	er Plan, Ma	y 2002)		
_		ŧ	€	Ξ	()
_	Seconds	Minutes	2 year	10 year	100 year
			In/hr	ln/hr	in/hr
	300	2	1.992	3.504	5.256
	006	15	1.192	2.144	3.556
	1800	30	0.812	1.422	2.436
	2700	45	0.601	1.045	1.78
	3600	09	0.509	0.874	1.424
	7200	120	0.325	0.55	0.845
	10800	180	0.245	0.41	0.599
	21600	360	0.146	0.231	0.317
	43200	720	0.088	0.139	0.19
	86400	1440	0.049	0.079	0.109
	Rational Method Data	ata			
	"C" coeff.	0.85		Se	See Graphs
	Area of Infl.	3.35 /	Acres		
	Length (ft)	1824	Feet		_
-1	Time of Conc.	18.62	18.62 Minutes		*
	Intensity 2yr	1.023 in/hr	n/hr	i = 7.0973	7.0973 t ^{-0.6623}
	Intensity 10yr	1.795 i	in/hr	i = 13.346	13.346 t ^{-0.686}
	Intensity 100 yr	2.906 in/hr	n/hr	i = 24.019	24.019 t -0.7223
	Add point flow	0	cfs		
	Peak Flow 2 yr	2.91	cfs		
	Peak Flow 10 yr	5.11	cfs	Q=C*I*A	•
	Peak Flow 100 yr	8.28 c	cfs		

FLOW (cfs)	2yr	10yr
SJCa = Bang. To Rdwd	7.61	12.97
一門 不知 人名 化二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十		

Receiving Stream: Stream Classification:	3B 4 N/A	[Aquation [Agricule Direct D	ale Road] c Wildlife: Class 3A ture: 4 or N/A] Drinking Water Sourd ortant Fishery for Hu	ce [N/A or 1C]		9:47 AM	
Stream Flow: Stream Hardness:	16.0 400.0	cfs mg/l as	7Q10 CaCO3				
Effluent Flow: Effluent Hardness:		MGD mg/l as	UDOT 106th South	h Highway Ove	erpass/Exchange	4.17	cfs 4
				Acute ZID:	50.00%		
Mixed Flow:	20.17	cfs		Dilution Fact.	3.84		
Mixed Hardness:	400.00	mg/l as	CaCO3				400.00
				am Allowable			
	_	Criteria		Concentratio	n		
	ug/l		ug/l	ug/l	ug/l	ug/l	ug/l
DADAMETED					4-Day	1-Hour	1-Hour
PARAMETER	4-Day		1-Hour		[Chronic] Permit Limits	[Acute]	[Acute]
					Determined		Controlling
					against Chronic		Acute Limit, Equals
					Standards,	Acute Limit	Chronic
Aquatic Wildlife Criteria	(Class 3 Wa	ters)	•	Upstream Conc. ug/l	May Equal Standard	Based Upon 50% ZID	where Acute < Chronic
Based upon a Hardness	of: 400 mg/l	as Ca	aCO3.				
	-	3.18x					
METALS, ug/L	Chronic	MDL	Acute				
Aluminum	87.00	9.5	750.0 ⁻	9.54	384.45	2,171.7	2,171.7
Arsenic	150.00	3.2	360.0	3.18	713.79	1,045.1	1,045.1
Cadmium	0.76	0.3	8.7	0.32	2.44	24.9	24.9
Chromium III	268.22	3.2	5611.7	3.18	1,285.97	16,380.0	16,380.0
ChromiumVI	11.00	15.9	16.0	15.90		16.2	16.2
Copper	30.50	3.18	51.7	6.00	124.58	139.4	139.4
Iron	nga panamaga ng matata. Ta matana kanapatan ang matana		1000.0	0.00		2,920.0	2,920.0
Lead	18.58	3.18	476.8	1.50	84.17	1,389.4	1,389.4
Mercury	0.01	0.6	2.4	0.64		5.8	5.8
Nickel	168.54	3.2	1515.9	3.18	803.52	4,420.4	4,420.4
Selenium	4.60	6.4	20.0	6.36		46.2	46.2
Silver	N/A	0.6	41.1	0.64	N/A	118.7	118.7
Zinc	387.83	0.3	387.8	15.00	1,819.49	1,103.7	1,819.5
				Rule (See No			a a contrata de seu el Paris, a constitue por destr

* Assumes 50 cfs for 2-hour period, which equels 2.69 MGD

Application	Receiving Stream: Stream Classification:		[Aquatia Wildlife	o Class 2A	2D 20 - : 0D		9:44 AM	
Mixed Flow: Effluent Flow: Effluent Hardness: 300.0 mg/l as CaCO3	Stream Flow:	4 N/A No 3.0	[Agriculture: 4 c Direct Drinking An Important Fi cfs 7Q10	or N/A] Water Sourd shery for Hu	ce [N/A or 1C]			
Mixed Flow:	3	1.29	MGD UDOT	106th South	n Highway Ove	erpass/Exchange	2.00	cfs *
Mixed Flow:	Effluent Hardness:	400.0	mg/l as CaCO3		A 715			
Additional Content Additio	Mixed Flow:	5.00	cfs					
PARAMETER A-Day 1-Hour					Dianoir act.	1.50		400.00
PARAMETER A-Day 1-Hour				Upstre	am Aliowabie	Effluent		
PARAMETER 4-Day 1-Hour			Criteria					
PARAMETER 4-Day 1-Hour	-	ug/l		ug/l	ug/l	ug/i	ug/l	ug/l
Aquatic Wildlife Criteria (Class 3 Waters) Upstream Conc. ug/l Determined against Chronic Standards, May Equal Standard Stan	DADAMETED					•	1-Hour	1-Hour
Determined against Chronic Standards Determined against Chronic Standards	PARAMETER	4-Day		1-Hour			[Acute]	[Acute]
Aquatic Wildlife Criteria (Class 3 Waters) Based upon a Hardness of: 400 mg/l as CaCO3. Metals, ug/l Chronic MDL Acute Acute MDL Acute Acut			•			_		Controlling
Aquatic Wildlife Criteria (Class 3 Waters) Based upon a Hardness of: 400 mg/l as CaCO3. Standard Standar								•
Aquatic Wildlife Criteria (Class 3 Waters) Based upon a Hardness of: 400 mg/l as CaCO3. Standard Standar						_		-
Aquatic Wildlife Criteria (Class 3 Waters) Based upon a Hardness of: 400 mg/l as CaCO3. 3.18x METALS, ug/L Aluminum 87.00 9.5 750.0 3.18 Arsenic 150.00 3.2 360.0 Cadmium 0.76 0.3 8.7 Chromium III 268.22 3.2 5611.7 ChromiumVI 11.00 15.9 16.0 15.90 17.50.						Standards,	Acute Limit	
Aquatic Wildlife Criteria (Class 3 Waters) Based upon a Hardness of: 400 mg/l as CaCO3. 3.18x METALS, ug/L Aluminum 87.00 9.5 750.0 Arsenic 150.00 3.2 360.0 Cadmium 0.76 0.3 8.7 Cadmium 0.76 0.3 8.7 Chromium III 268.22 3.2 5611.7 ChromiumVI 11.00 15.9 16.0 15.90 16.0 15.90 1750.0 1000.0 1,750.0 1,7					Upstream	May Equal	Based Upon	
NETALS, ug/L Chronic MDL Acute	Aquatic Wildlife Criteria (Class 3 Wat	ers)		Conc. ug/l	Standard	·	
METALS, ug/L Chronic MDL Acute Aluminum 87.00 9.5 750.0 9.54 203.19 1,305.3 1,305.3 Arsenic 150.00 3.2 360.0 3.18 370.23 627.6 627.6 Cadmium 0.76 0.3 8.7 0.32 1.41 15.0 15.0 Chromium III 268.22 3.2 5611.7 3.18 665.78 9,818.0 9,818.0 ChromiumVI 11.00 15.9 16.0 15.90 # 3.65 16.1 16.1 Copper 30.50 3.18 51.7 6.00 67.25 85.9 85.9 Iron 1000.0 0.00 1,750.0 1,750.0 Lead 18.58 3.18 476.8 1.50 44.20 833.3 833.3 Mercury 0.01 0.6 2.4 0.64 0.64 0.01 3.7 3.7 Nickel 168.54 3.2 1515.9 3.18	Based upon a Hardness	of: 400 mg/l	as CaCO3.	ı				
Aluminum 87.00 9.5 750.0 9.54 203.19 1,305.3 1,305.3 Arsenic 150.00 3.2 360.0 3.18 370.23 627.6 627.6 Cadmium 0.76 0.3 8.7 0.32 1.41 15.0 15.0 Chromium III 268.22 3.2 5611.7 3.18 665.78 9,818.0 9,818.0 ChromiumVI 11.00 15.9 16.0 15.90 # 3.65 16.1 16.1 16.1 Copper 30.50 3.18 51.7 6.00 67.25 85.9 85.9 Iron 1000.0 0.00 1,750.0 1,750.0 Lead 18.58 3.18 476.8 1.50 44.20 833.3 833.3 Mercury 0.01 0.6 2.4 0.64 # 0.01 3.7 3.7 Nickel 168.54 3.2 1515.9 3.18 416.58 2,650.5 2,650.5 Selenium 4.60 6.4 20.0 6.36 # 1.96 30.2 30.2 Silver N/A 0.6 41.1 0.64 N/A 71.4 71.4								
Arsenic 150.00 3.2 360.0 3.18 370.23 627.6 627.6 Cadmium 0.76 0.3 8.7 0.32 1.41 15.0 15.0 Chromium III 268.22 3.2 5611.7 3.18 665.78 9,818.0 9,818.0 ChromiumVI 11.00 15.9 16.0 15.90 # 3.65 16.1 16.1 16.1 Copper 30.50 3.18 51.7 6.00 67.25 85.9 85.9 Iron 1000.0 0.00 1,750.0 1,750.0 Lead 18.58 3.18 476.8 1.50 44.20 833.3 833.3 Mercury 0.01 0.6 2.4 0.64 # 0.01 3.7 3.7 Nickel 168.54 3.2 1515.9 3.18 416.58 2,650.5 2,650.5 Selenium 4.60 6.4 20.0 6.36 # 1.96 30.2 30.2 Silver N/A 0.6 41.1 0.64 N/A 71.4 71.4							_	
Cadmium Chromium III 0.76 0.3 8.7 0.32 1.41 15.0 15.0 Chromium III 268.22 3.2 5611.7 3.18 665.78 9,818.0 9,818.0 ChromiumVI 11.00 15.9 16.0 15.90 # 3.65 16.1 16.1 Copper 30.50 3.18 51.7 6.00 67.25 85.9 85.9 Iron 1000.0 0.00 1,750.0 1,750.0 1,750.0 1,750.0 Lead 18.58 3.18 476.8 1.50 44.20 833.3 833.3 Mercury 0.01 0.6 2.4 0.64 4 0.01 3.7 3.7 Nickel 168.54 3.2 1515.9 3.18 416.58 2,650.5 2,650.5 Selenium 4.60 6.4 20.0 6.36 # 1.96 30.2 30.2 Silver N/A 0.6 41.1 0.64 N/A 71.4 7								
Chromium III 268.22 3.2 5611.7 3.18 665.78 9,818.0 9,818.0 ChromiumVI 11.00 15.9 16.0 15.90 # 3.65 16.1 16.1 16.1 16.1 16.1 16.1 16.1 1								
ChromiumVI 11.00 15.9 16.0 15.90 # 3.65 16.1 16.1 Copper 30.50 3.18 51.7 6.00 67.25 85.9 85.9 Iron 1000.0 0.00 1,750.0 1,750.0 Lead 18.58 3.18 476.8 1.50 44.20 833.3 833.3 Mercury 0.01 0.6 2.4 0.64 # 0.01 3.7 3.7 Nickel 168.54 3.2 1515.9 3.18 416.58 2,650.5 Selenium 4.60 6.4 20.0 6.36 # 1.96 30.2 30.2 Silver N/A 0.6 41.1 0.64 N/A 71.4 71.4								
Copper 30.50 3.18 51.7 6.00 67.25 85.9 85.9 Iron 1000.0 0.00 1,750.0 1,750.0 1,750.0 Lead 18.58 3.18 476.8 1.50 44.20 833.3 833.3 Mercury 0.01 0.6 2.4 0.64 # 0.01 3.7 3.7 Nickel 168.54 3.2 1515.9 3.18 416.58 2,650.5 2,650.5 Selenium 4.60 6.4 20.0 6.36 # 1.96 30.2 30.2 Silver N/A 0.6 41.1 0.64 N/A 71.4 71.4								
Iron 1000.0 0.00 1,750.0 1,750.0 Lead 18.58 3.18 476.8 1.50 44.20 833.3 833.3 Mercury 0.01 0.6 2.4 0.64 # 0.01 3.7 3.7 Nickel 168.54 3.2 1515.9 3.18 416.58 2,650.5 2,650.5 Selenium 4.60 6.4 20.0 6.36 # 1.96 30.2 30.2 Silver N/A 0.6 41.1 0.64 N/A 71.4 71.4	DENEROUS - OF MATERIAL SEASON SEASON SEASON DESCRIPTION OF STANDARD SEASON SEA	Grant Committee Control of the Committee Control of the Committee Control of the	erangera engineering system on a commence of the commence of t	and proming a general property	The second secon	PAMES NO STOREST PRINCIPLE STORES AND STORES.	SECULATION OF THE PROPERTY OF	College College States College
Lead 18.58 3.18 476.8 1.50 44.20 833.3 833.3 Mercury 0.01 0.6 2.4 0.64 # 0.01 3.7 3.7 Nickel 168.54 3.2 1515.9 3.18 416.58 2,650.5 2,650.5 Selenium 4.60 6.4 20.0 6.36 # 1.96 30.2 30.2 Silver N/A 0.6 41.1 0.64 N/A 71.4 71.4		30.30	3.10	·		67.25	social marketings and a substitutionable.	**************************************
Mercury 0.01 0.6 2.4 0.64 # 0.01 3.7 3.7 Nickel 168.54 3.2 1515.9 3.18 416.58 2,650.5 2,650.5 2,650.5 2,650.5 30.2		12 52	3 18	, group recovery as a grammar as a supple		44.00		National World County County County County
Nickel 168.54 3.2 1515.9 3.18 416.58 2,650.5 2,650.5 Selenium 4.60 6.4 20.0 6.36 # 1.96 30.2 30.2 Silver N/A 0.6 41.1 0.64 N/A 71.4 71.4		many common and an included the agent many to the control of 2000 and 1900	the control of a committee of the control of the co	a from the first of the sale o		process and the state of the st		
Selenium 4.60 6.4 20.0 6.36 # 1.96 30.2 30.2 Silver N/A 0.6 41.1 0.64 N/A 71.4 71.4					Charles and the second			
Silver N/A 0.6 41.1 0.64 N/A 71.4 71.4								
		DELECTED CONTRACTOR SECTION ASSESSMENT ASSES	SECURED SEASON REPORT OF THE PROPERTY OF THE P	1950 Mar County opposite and providing and		NAMED TO A PARTY ASSOCIATION OF THE PARTY OF	The transport of Society and the commence	

* Assumes 24 cfs for 2-hour period, which equals 1-29MGD.

Rule (See Note):

Receiving Stream: Stream Classification: Stream Flow: Stream Hardness:	### Signature of the image of t						
Effluent Flow: Effluent Hardness:		MGD mg/l as C	UDOT 106th Soutl	n Highway Ove	rpass/Exchange	0.70	cfs ⊁
Mixed Flow: Mixed Hardness:	1.70		2-000	Acute ZID: Dilution Fact.	50.00% 1.43		
Mixed narquess:	400.00	mg/l as C	acos				400.00
		Upstream Allowable Effluent Criteria Concentration					
_	ug/l		ug/l	ug/l	ug/l	ug/l	ug/i
PARAMETER	4-Day		1-Hour		4-Day [Chronic] Permit Limits	1-Hour [Acute]	1-Hour [Acute]
					Determined against Chronic Standards,	Acute Limit	Controlling Acute Limit, Equals Chronic
				Upstream	May Equal	Based Upon	where Acute
Aquatic Wildlife Criteria (Class 3 Wat	ters)		Conc. ug/l	Standard	50% ZID	< Chronic
Based upon a Hardness	of: 400 ma/l	as Ca	സ				
	31. 400 mg/l	3.18x	000.				
METALS, ug/L	Chronic	MDL	Acute				
Aluminum	87.00	9.5	750.0	9.54	197.39	1,277.6	1,277.6
Arsenic	150.00	3.2	360.0	3.18	359.24	614.3	614.3
Cadmium	0.76	0.3	8.7	0.32	1.38	14.7	14.7
Chromium III	268.22	3.2	5611.7	3.18	645.95	9,608.2	9,608.2
ChromiumVI	11.00	15.9	16.0	15.90		16.1	16.1
Copper	30.50	3.18	51.7	6.00	65.42	84.2	84.2
Iron			1000.0	0.00	and the second s	1,712.6	1,712.6
Lead	18.58	3.18	476.8	1.50	42.92	815.5	815.5
Mercury	0.01	0.6	2.4	0.64	# 0.01	3.7	3.7
Nickel	168.54	3.2	1515.9	3.18	404.21	2,593.9	2,593.9
Selenium	4.60	6.4	20.0	6.36	# 2.09	29.7	29.7
Silver	N/A	0.6	41.1	0.64	N/A	69.9	69.9
Zinc	387.83	0.3	387.8	15.00 Rule (See No	919.18 ite):	653.5	919.2
* Assumes 8.4	cfs for	2-h	our peno	od, which	th equal	15 0.49	5 MGD

